BANDITS OF TIME by Ray Cummings

SEE BACK COVER

# AMAZING STORIES

41

DECEMBER 20c

The Secret of PLANETOID 88

By ED EARL REPP

A "back-seat driver"
gets your goat . . . *but*

# INFECTIOUS DANDRUFF

## *gets it faster!*

### START NOW WITH LISTERINE!

WHAT makes the infectious type of dandruff so annoying, so distressing, are those troublesome flakes on collar or dress . . . and the scalp irritation and itching . . . that so often accompany the condition.

If you're troubled in this way, look out—you may have this common form of dandruff, so act now before it gets worse.

**Has Helped Thousands**

Start right in with Listerine Antiseptic and massage. This is the medical treatment that has shown such amazing results in a substantial majority of clinical test cases . . . the treatment that has also helped thousands of other people.

You, too, may find it as helpful as it is delightful. Listerine is so easy, so simple to use, and so stimulating! You simply douse it on the scalp morning and night and follow with vigorous and persistent massage.

Thousands of users have marvelled at how flakes and scales begin to disappear, how much cleaner and healthier their scalps appear. And remember:

**Kills "Bottle Bacillus"**

Listerine Antiseptic kills millions of germs on scalp and hair, including Pityrosporum ovale, the strange "Bottle Bacillus" recognized by many outstanding dandruff specialists as a causative agent of infectious dandruff.

This germ-killing action, we believe, helps to explain why, in a series of tests, 76% of dandruff sufferers showed either complete disappearance of or marked improvement in the symptoms of dandruff within a month.

LAMBERT PHARMACAL CO., *St. Louis, Mo.*

### The Treatment

**MEN:** Douse full strength Listerine on the scalp morning and night.

**WOMEN:** Part the hair at various places, and apply Listerine Antiseptic right along the part with a medicine dropper, to avoid wetting the hair excessively.

Always follow with vigorous and persistent massage with fingers or a good hairbrush. Continue the treatment so long as dandruff is in evidence. And even though you're free from dandruff, enjoy a Listerine massage once a week to guard against infection. Listerine is the same antiseptic that has been famous for more than 50 years as a mouth wash and gargle.

Accepted Good Housekeeping Bureau

# Are You HAUNTED *by* FEARS like these?

Suppose I am drafted! How can I become more than a private?

Will I stick in this same low pay job another 3 years?

Bills! Bills! Will I ever be more than one jump ahead of the sheriff?

Will a machine be invented that will wipe out my job?

My job will be too tough ten years from now--what then?

Is there a way out for me? What can I do?

Where or how can I make more money?

*You know that LOW PAY is at the bottom of nearly all fears that haunt a man's future. You know too that it takes specialized ability to get into the higher pay brackets. If fear of the future haunts you—if you can't see in the years ahead, security, freedom from money worries, here's an answer to "How can I acquire specialized ability?" Risk a postcard—find out what Radio offers.*

# Learn at Home to Make up to $50 a Week as a Radio Technician

Here is a quick way to more pay. Radio offers the chance to make $5, $10 a week extra in spare time a few months from now. There is an increasing demand for full time Radio Technicians and Radio Operators, too. Many make $30, $40, $50 a week. On top of a large civilian demand for Radios, the Radio industry is getting millions of dollars in Defense Orders. Clip the coupon below and mail it. Find out how I train you for good pay in Radio.

### Why Many Radio Technicians Make $30, $40, $50 a Week

Over 800 broadcasting stations in the U. S. employ thousands of Radio Technicians with average pay among the country's best paid industries. Repairing, servicing, selling home and auto Radio receivers (there are over 50,197,000 in use) gives good jobs to thousands. Many other Radio Technicians take advantage of the opportunities to have their own service or retail Radio businesses. Think of the many good pay jobs in connection with Aviation, Commercial, Police Radio and Public Address Systems. N. R. I. gives you the required knowledge of Radio for these jobs. N. R. I. trains you to be ready when Television opens new jobs. Yes, Radio Technicians make good money because they use their heads as well as their hands. They must be trained.

### Beginners Quickly Learn to Earn $5, $10 a Week Extra in Spare Time

Nearly every neighborhood offers opportunities for a good part-time Radio Technician to make extra money fixing Radio sets. I give you special training to show you how to start cashing in on these opportunities early. You get Radio parts and instructions for building test equipment, for conducting experiments that give you valuable practical experience. You also get a modern Professional Radio Servicing Instrument. My fifty-fifty method —half working with Radio parts, half studying my lesson texts—makes learning Radio at home interesting, fascinating, practical.

### Find Out How I Train You for Good Pay in Radio

Mail the coupon below. I'll send my 64-page book FREE. It tells about my Course; the types of jobs in the different branches of Radio; shows letters from more than 100 of the men I trained so you can see what they are doing, earning. MAIL THE COUPON in an envelope or paste on a penny postal.

J. E. SMITH, President
Dept. 1MM,
National Radio Institute
Washington, D. C.

### EXTRA PAY IN ARMY, NAVY, TOO

Every man likely to go into military service, every soldier, sailor, marine, should mail the Coupon Now! Learning Radio helps men get extra rank, extra prestige, more interesting duty at pay up to 6 times a private's base pay. Also prepares for good Radio jobs after service ends. IT'S SMART TO TRAIN FOR RADIO NOW

THIS **FREE** BOOK HAS SHOWN HUNDREDS HOW TO MAKE GOOD MONEY

J. E. SMITH, President, Dept. 1MM
National Radio Institute, Washington, D. C.

Mail me FREE, without obligation, your 64-page book, "Rich Rewards in Radio." (No salesman will call. Write plainly.)

Name..... Age.....

Address.....

City..... State.....

DECEMBER
1941

# AMAZING STORIES

TRADE MARK REGISTERED

VOLUME 15
NUMBER 12

# Contents

## STORIES

**THE SECRET OF PLANETOID 88 (Novel)**.....by Ed Earl Repp..... 10
Dane Cabot's heritage was a secret from his dead father—of a great sleeping army on another world.

**BANDITS OF TIME (Novelet)**.....by Ray Cummings..... 62
He called himself Tork, and he wanted Bob and Doris to come with him into time to found a new empire.

**RAYHOUSE IN SPACE (Short)**.....by Duncan Farnsworth..... 82
Claude Kelvin looked at the savage **krickack** as a biologist would, and forgot to be properly afraid.

**THE ODDS ON SERGEANT SHANE (Short)**.....by John York Cabot..... 98
Not even Sergeant Shane could explain how he expected to win by calling tails on a two-headed coin!

**PLANET OF LOST MEN (Short)**.....by P. F. Costello.....110
Dirk Temple was a wastrel, and soft; so landing on this hell world was a pretty sad thing for him!

**THE MAN WHO WASN'T HIMSELF (Short)**.....by Alexander Blade.....130
Perdeau had a great idea; borrow another man's body, commit witnessed murder, then return it . . .

## FEATURES

The Observatory..... 8
Insects—Friend or Foe?..... 81
Terrible Trees..... 97
Jupiter's Striped Jacket.....124
World's Greatest Goldfish Bowl.....125
Scientific Mysteries.....126
Odd Science Facts.....129
Discussions.....139
Correspondence Corner.....144
A City on Callisto.....145

Front cover painting by Rod Ruth, illustrating a scene from "**The Secret of Planetoid 88**"
Back cover painting by Frank R. Paul, depicting "**A City on Callisto**"
Illustrations by Rod Ruth; Jay Jackson; John Charles Thoman; Joe Sewell
Cartoons by Magarian; Marvin Townsend; R. Newman

**Copyright, 1941, ZIFF-DAVIS PUBLISHING COMPANY**
**Member of the Audit Bureau of Circulations**
**William B. Ziff, Publisher; B. G. Davis, Editor**
**Raymond A. Palmer, Managing Editor; Herman R. Bollin, Art Director; H. G. Strong, Circulation Director**

We do not accept responsibility for the return of unsolicited manuscripts or artwork. To facilitate handling, the author should inclose a self-addressed envelope with the requisite postage attached, and artists should enclose or forward return postage. Accepted material is subject to whatever revision is necessary to meet requirements. Payments for manuscripts and illustrations will be made at our current rates.

The names of all characters that are used in short stories, serials and semi-fiction articles that deal with types are fictious. Use of a name which is the same as that of any living person is coincidental

AMAZING STORIES DECEMBER 1941

Published monthly by ZIFF-DAVIS PUBLISHING COMPANY at 608 South Dearborn Street, Chicago, Ill. New York Office, 270 Madison Ave., New York City. Washington Bureau, Occidental Hotel, Lt. Col. Harold F. Hartney, Manager. Entered as second class matter October 6, 1938, at the Post Office, Chicago, Illinois under the act of March 3rd, 1879. Subscription $2.40 a year (12 issues); Canada $2.90; Foreign $3.40. Subscribers should allow at least two weeks for change of address. All communications about subscriptions should be addressed to the Director of Circulation, 608 South Dearborn St., Chicago, Ill.

Volume 15
Number 12

# WORLD'S LARGEST DENTAL PLATE MAKERS

# FALSE TEETH

## $6.85 to $35 by MAIL

## SEND NO MONEY!

Posed by a Professional Model

BEFORE

AFTER

**Mrs. Elsie Boland of Norton, Kansas, writes:**

"Enclosed find two pictures. One shows how I looked before I got my teeth; the other one afterwards. Your teeth are certainly beautiful. I have not had mine out since the day I got them, except to clean them."

**Harry Willoughby, Adairville, Kentucky, writes:**

"I have received my teeth and am PROUD OF THEM."

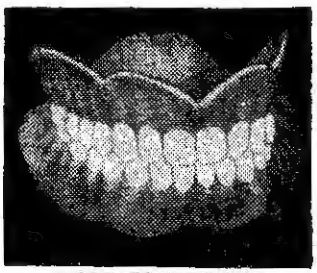
**Mrs. Geo. G. Conklin, Bridgeport, Connecticut, writes:**

"I received my set of teeth. I wear them day and night. I have good reason to be well pleased with them. Thank you very much."

The foregoing are a few of thousands of unsolicited letters. We do not imply that you will obtain the same results. What is important to you is WE GUARANTEE YOUR MONEY BACK IF YOU ARE NOT 100% SATISFIED.

### MADE-TO-MEASURE DENTAL PLATES DIRECT FROM OUR LABORATORY TO YOU!

We make to measure for you **individually**—BY MAIL—Dental Plates for men and women—from an impression of your own mouth taken by you at your home. We have **thousands of customers** all over the country wearing teeth we made by mail at sensible prices.



**HAND-CARVED SET**

### AT ROCK-BOTTOM PRICES

If you find out what others have paid for theirs, you will be astounded when you **see how little ours will cost you!** By reading our catalog, you will learn how to **save half or more on dental plates for yourself.** Monthly payments possible.

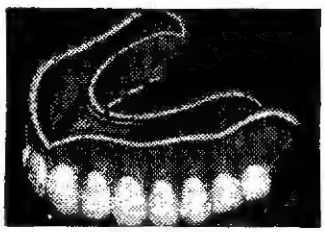
**PARTIAL**

### ON 60 DAYS' TRIAL

**Make us prove every word we say.** Wear our teeth on trial for as long as 60 days. Then, if you are not **perfectly satisfied** with them, they will not cost you a cent.

### WITH MONEY-BACK GUARANTEE OF SATISFACTION

We take this risk. We guarantee that if you are not **completely satisfied** with the teeth we make for you, then any time within 60 days we will immediately refund every cent you have paid us for them. **We take your word.** You are the judge.



**ROOFLESS**

### HIGH-GRADE MATERIAL AND EXPERT WORKMANSHIP

TRY our practically unbreakable ROOFLESS, PARTIAL and TRANSLUCENT plates. Our dentures are set with **pearly-white, genuine, porcelain teeth;** constructed from **high-grade materials, with expert workmanship.** We make **all styles** of plates. **A dentist supervises the making of each plate. . . .**

**FREE** IMPRESSION MATERIAL, Catalog with our new low prices and information. Don't put this off. Do it TODAY! CLIP COUPON OR WRITE. A one cent postcard with name and address plainly written is all that is necessary.

**We also Repair or Reproduce Old Plates—48-hour Service**

## UNITED STATES DENTAL COMPANY

**1555 Milwaukee Ave., Dept. B-13, Chicago, Ill.**

**MAIL THIS COUPON NOW**

***FREE*** **UNITED STATES DENTAL COMPANY**

Dept. B-13, 1555 Milwaukee Ave.,
CHICAGO, ILLINOIS.

Send, without obligation, your FREE impression material, catalog, and information.

NAME.....

ADDRESS.....
(Print Clearly)

# "I Talked with God"

**(Yes, I Did—Actually and Literally)**

and as a result of that little talk with God a strange Power came into my life. After 42 years of horrible, dismal, sickening failure, everything took on a brighter hue. It's fascinating to talk with God, and it can be done very easily once you learn the secret. And when you do — well — there will come into your life the same dynamic Power which came into mine. The shackles of defeat which bound me for years went a-shimmering—and now—?—well, I own control of the largest daily newspaper in our County, I own the largest office building in our City, I drive a beautiful Cadillac limousine. I own my own home which has a lovely pipe-organ in it, and my family are abundantly provided for after I'm gone. And all this has been made possible because one day, ten years ago, I actually and literally talked with God.

You, too, may experience that strange mystical Power which comes from talking with God, and when you do, if there is poverty, unrest, unhappiness, or ill-health in your life, well — this same God-Power is able to do for you what it did for me. No matter how useless or helpless your life seems to be — all this can be changed. For this is not a human Power I'm talking about—it's a God-Power. And there can be no limitations to the God-Power, can there? Of course not. You probably would like to know how you, too, may talk with God, so that this same Power which brought me these good things might come into your life, too. Well — just write a letter or a post-card to Dr. Frank B. Robinson, Dept. 970, Moscow, Idaho, and full particulars of this strange Teaching will be sent to you free of charge. But write now — while you are in the mood. It only costs one cent to find out, and this might easily be the most profitable one cent you have ever spent. It may sound unbelievable — but it's true, or I wouldn't tell you it was. — Advt. Copyright, 1939, Frank B. Robinson.

---

**SAVE UP TO 50% FACTORY-TO-YOU**

9 BANDS (Of Great Realism)

30 DAYS TRIAL

20 TIMES BETTER FOREIGN TUNING with SUPER BAND SPREAD RADIO!

PUT THIS CHASSIS IN YOUR PRESENT CABINET

E-Z TERMS

UP TO $50.00 TRADE-IN

WRITE for big FREE catalog. New 1942 models include Radios, Radio-Phonos, Home Recorders. Sensationally low factory-to-you prices: $11.95 to $212.00 ...up to 16 tubes. *(User-Agents Wanted).*

$19.75 COMPLETE with SPEAKER, TUBES, PUSH-BUTTON TUNING, MAGNA-TENNA LOOP AERIAL—READY TO PLAY

**MIDWEST RADIO CORPORATION**

DEPT. 128-E CINCINNATI, OHIO

---

**STOP Itching** *GET RELIEF This Fast Way* **-or Money Back**

For quick relief from itching of eczema, pimples, athlete's foot, scales, scabies, rashes and other externally caused skin troubles, use world-famous, cooling, antiseptic, liquid D. D. D. Prescription. Greaseless, stainless. Soothes irritation and quickly stops the most intense itching. 35c trial bottle proves it, or money back. Ask your druggist today for **D. D. D. PRESCRIPTION.**

---

**SONG POEM WRITERS:**

Send us your original poem, Mother, Home, Love, Sacred, Patriotic, Comic or any subject, for our plan and FREE Rhyming Dictionary at once.

**RICHARD BROTHERS**
**27 Woods Building Chicago, Ill.**

---

**DO YOU WANT TO STOP TOBACCO?**

Banish the craving for tobacco as thousands have. Make yourself free and happy with Tobacco Redeemer. Not a substitute, not habit forming. Write for free booklet telling of injurious effect of tobacco and dependable, easy way to relieve the craving many men have.

**Newell Pharmacal Co.**
**Dept. 600, St. Louis, Mo.**

FREE BOOK

---

**ASTHMA**

**WRITE FOR *FREE TRIAL OFFER!***

If you suffer from Asthma, Paroxysms, from coughs, gasping, wheezing — write quick for daring FREE TRIAL OFFER of amazing relief. Inquiries from so-called "hopeless" cases especially invited. Write

**NACOR, 396-Y State Life Bldg., Indianapolis, Ind.**

---

**High School Course at Home** **Many Finish in 2 Years**

Go as rapidly as your time and abilities permit. Course equivalent to resident school work—prepares for college entrance exams. Standard H.S. texts supplied. Diploma. Credit for H. S. subjects already completed. Single subjects if desired. High school education is very important for advancement in business and industry and socially. Don't be handicapped all your life. Be a High School graduate. Start your training now. Free Bulletin on request. No obligation.

**American School, Dept. H-839, Drexel at 58th, Chicago**

---

**EARN MONEY AT HOME**

Just put a few finishing touches to our genuine water color pictures. Easy, fascinating work. Pays big money. No ability necessary. We train you at home. Complete instructions and sample picture sent on receipt of 25c coin, or nine 3c stamps.

**RAY ROGERS, 4 Arbuckle Bldg., BROOKLYN, N. Y.**

# Getting Up Nights Makes Many Feel Old

Do you feel older than you are or suffer from Getting Up Nights, Backache, Nervousness, Leg Pains, Dizziness, Swollen Ankles, Rheumatic Pains, Burning, scanty or frequent passages? If so, remember that your Kidneys are vital to your health and that these symptoms may be due to non-organic and non-systemic Kidney and Bladder troubles—in such cases CYSTEX (a physician's prescription) usually gives prompt and joyous relief by helping the Kidneys flush out poisonous excess acids and wastes. You have everything to gain and nothing to lose in trying Cystex. An iron-clad guarantee wrapped around each package assures a refund of your money on return of empty package unless fully satisfied. Don't take chances on any Kidney medicine that is not guaranteed. Don't delay. Get Cystex (Sis-tex) from your druggist today. Only 35c. The guarantee protects you.

**Cystex**
Helps Flush Kidneys

# FALSE TEETH

LOW AS $6.85

90 DAYS' TRIAL
TEST THEM
EXAMINE THEM

We make FALSE TEETH for you by mail from your own impressions. You have satisfaction of MONEY BACK GUARANTEE. Customers in United States and Canada report SATISFACTION but you be your own JUDGE.

**SEND NO MONEY** WRITE TODAY for FREE BOOKLET and MATERIAL.

**CLEVELAND DENTAL SUPPLY CO.**
Dept. 50-R1, East St. Louis, Illinois

# Learn to MOUNT BIRDS

**Tan SKINS, make up FURS**

Be a Taxidermist. Double your hunting fun. We teach you at Home. Mount Birds, Animals, Fish, Heads, common specimens. Fun and profits. Decorate home and den MAKE MONEY. Mount game, tan for others. Big profits in spare time. WRITE TODAY.

100 game pictures in FREE BOOK
Hunters, get your copy. It's Now Free. Send post card. State your AGE.

FREE BOOK

NORTHWESTERN SCHOOL OF TAXIDERMY
Dept. 3038 Omaha, Nebraska

# THERE IS NO EMERGENCY

for those who have a true and stable philosophy of life. An invulnerable defense originates in a mind impervious to error. Are you invulnerable? If not, are you doing anything to achieve invincibility? Read LEMURIA THE INCOMPARABLE. 60 pages of evidence supporting the existence of a New Race and Order. TWO DIMES cover the mailing cost. No obligation. Send request today to Dept. 51.

950 N. PLANKINTON AVE. LEMURIAN FELLOWSHIP MILWAUKEE, WISCONSIN

# BARGAINS!!!
## Used Home-Study Courses
## BOUGHT-SOLD-RENTED

72-PAGE ILLUSTRATED CATALOG FREE

Write today for big FREE illustrated catalog explaining this amazing service. Used correspondence courses and educational books on every subject. 100% satisfaction guaranteed. We buy for cash—we offer unbelievable bargains. Send your name on penny postcard at once! No obligation.

NELSON CO., 4500 Sherman, Dept. L-228, Chicago

# ACCOUNTANCY

**One of America's best paying professions**

## These Are OPPORTUNITY DAYS for the Trained ACCOUNTANT!

WITH new state and federal legislation requiring more accurate accounting from businesses than ever before, the trained, successful accountant is certainly a man to be envied. Much in demand, member of "America's best-paid profession," an important figure in affairs, he is one of the most influential and *necessary* individuals in the whole business scheme!

His is a profession YOU may be considering at this moment. If so, don't fail also to consider critically how, when, and from whom you will secure your Higher Accountancy training. Consider particularly LaSalle's record of more than 500,000 Accountancy-trained men and women during the past thirty-three years—a record unsurpassed by any other educational institution.

Remember, too, how numerous are the available accountancy schools and courses in the country. Yet, despite this fact, *approximately one-tenth of all C.P.A.'s* have been student members of LaSalle.

As to the training itself, you will find it absolutely complete; from Practical Accounting through to Accounting Systems, and Income Tax Procedure, including C. P. A. Coaching that qualifies you thoroughly.

Spare-time study does it all! No interference with your present work and a careful analysis of thousands of student histories reveals that some have realized, in increased later earnings, as high as $50 returns on every hour devoted to such study.

If you are actually in earnest—are willing to work devotedly for your future success, look into this subject carefully, thoughtfully, and from every angle. Full information and a 48-page survey of this opportunity field will be sent you on request.

*Sign and mail coupon for complete details*

**LASALLE EXTENSION UNIVERSITY**
**A Correspondence Institution**

**Dept. 1175-HR** **Chicago**

Kindly tell me more about the present opportunities in Accounting and how your training can help me grasp them. Also send me—free—your booklet on "Accountancy, the Profession That Pays."

☐ Higher Accountancy

*Other LaSalle Opportunities:*

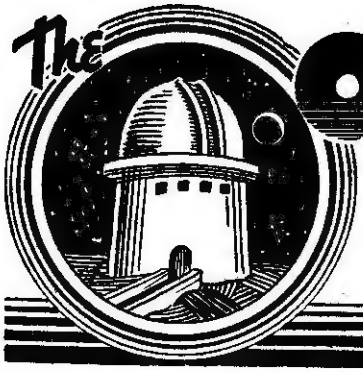
If more interested in one of the fields indicated below, check and mail now.

| | |
|---|---|
| ☐ Business Management | ☐ Expert Bookkeeping |
| ☐ Modern Salesmanship | ☐ C. P. A. Coaching |
| ☐ Law—Degree of LL. B. | ☐ Traffic Management |
| ☐ Commercial Law | ☐ Stenotypy |

*Name*.....

*Present Position*.....

*Address*.....



# The OBSERVATORY by THE Editor

AN editor's life is a paradoxical thing. Here we are, putting out the December issue, and it's really only sometime in September, and you'll be reading this in October, but anyway, Merry Christmas to you all! Maybe time travel has something to do with it . . .

AND after Christmas comes New Year, so Happy New Year too! But we have more to say than *that,* this time! We have great news, important news, news that will thrill you all—we hope. Get ready, get set, hang on!

*We're going to have another big issue, like our 15th Anniversary issue!*

YES, it's true. The January issue will be another gigantic 244 page book, chock-full of the best science fiction stories we've been able to get—and have we been able to get 'em! All of you have heard of Harry Bates? No? Where've you been? Well, anyway, he's writing his first story for AMAZING STORIES, and it's one of the finest pieces we've read in twelve months and two days and six minutes! We mean, it's good.

He's just one of the boys who will appear in the big issue to make it the biggest surprise we've ever handed out.

For instance, there's another newcomer, a guy named Patton, and to be Frank (that's his first name) we had to practically threaten him with various dire fates to make him turn from his usual field, which is writing weighty scientific tomes for the California Institute of Technology, to turn out some fiction for us. But he did it (after we sent him a photostat of a cover by still another new man—artist Malcolm Smith) and he did it well!

INCIDENTALLY, Henry Gade was supposed to write a yarn for that same cover, and he up and disappointed us. Got married, or something. Heck of a note, letting honeymoons interfere with the progress of AMAZING STORIES. The no good son of a gun! Best wishes, Hank!

DON WILCOX graces the issue with the best Ben Gleed story he's turned out yet. It's called "The Fiend of New London," but don't let the title fool you. It's quite an unexpected, and scientific, fiend!

WE'VE got three or four rattling good space stories by those up-and-coming boys, Costello, Farnsworth, and Cabot. A few of the titles are "Q-Ship of Space," "Rehearsal for Danger" and "Mystery on Base Ten."

And there's Alfred Bester with a story about a fellow who has something to sell we all think we ought to get for nothing—life. Intriguing, eh?

PAL PAUL is painting the finest "City on Another World" he's done yet, just to make this big issue an event for Paul fans too. And we've got artists Finlay, Magarian, Fuqua, Ruth, Krupa, Jackson, and many others working on some of the finest work any of them have done. We just hinted that this had to be special, because—well, just because. And now you all know why!

NATURALLY, all our usual features will be there, plus a few new ones. In fact, there won't be a page that won't be just another part of the best book, without any preening on our part, we've put out yet. We think we're going to have a perfect right to be proud of it, and for our reason for giving it to you. The reason is simple—you asked for another big issue, and we couldn't think of a better time than the issue that starts off 1942—January. Was our reason good enough? Um, let's see, what would our reason be for still another big issue . . . aw heck, your editor is dreaming again. But we can dream, can't we? (time out for dreaming).

NOW for a few solid things about this issue, and a few interesting items we dug up while "observing" during the past thirty days.

TAKE our cover story this month, for a starter. It's Ed Earl Repp's first novel for us in so long we can't remember the date. But if it doesn't strike you as the best space story you've read from his niche in science fiction's hall of fame, you need more batting practice. It's a juicy bit of interplanetary stuff, typical of his facile pen, full of

mystery, and science, and action, and human situation. In short, Repp can still burn up the space-lanes for our money!

OLD favorite Ray Cummings is back once more with a fascinating time-travel yarn. We all like this kind of story, and this is one you'll enjoy for its romantic, refreshing treatment so expected from the old master.

JOHN YORK CABOT'S latest effort to come from his effortless typewriter is another Sergeant Shane story, based on the character that made such an unexpected hit in a recent issue. This big palooka of the Space Marines has an uncanny faculty for getting into trouble, and getting out of it by his wit, used in a rather witless fashion. You'll like his clever (?) managing of an important race between members of the crews of the two biggest warships in the fleet! But you'll have to forgive him for pulling a few fast ones—a sailor has to have some fun, doesn't he?

ESPECIALLY do we want to point out the latest space story by Duncan Farnsworth. Your editors think this one is something for the books. We can't exactly tell you what it has that makes it "sing," but you'll understand what we mean when you read it.

SCIENTIST L. TAYLOR HANSEN does our Scientific Mystery this month, and if you remember his story "Lords of the Underworld," you'll be mighty interested in what he has to say about those ancient cities he described in his story, because they do exist, and are probably South America's crowning mystery.

ONCE again we put in a call for gags for our very popular cartoons. We can't understand why a country as cartoon-conscious as this can't produce science fiction cartoonists who can ring the bell more than once in not-very-often. Come on, you smart readers, earn yourselves some easy money. We pay for cartoon gags and ideas, and we assign 'em to cartoonists to finish.

OUR recent "blasts" at the fans and the fan magazines have created quite a stir. The August issue of one of these magazines, circulated to a small reader group, has several comments we would like to pass on. We quote, in the next paragraph, exactly as we read it in Lynn Bridges' column:

"AFTER accusing our mag of gross inaccuracies in reporting, AMAZING'S editor proceeds to *misquote* us . . . When we said the stories in AS and FA stink, we definitely did *not* use the words "without exception." What we meant, of course, was that the stories, *almost* without exception, produce an unpleasant aroma. In general, the stories in AMAZING and Fantastic are pure adventure, with just a touch of science or fantasy, the more illogical the better. And the editor's habit of "improving" on the author's work by rewriting the ending (and, we have reason to believe, sometimes the beginning and the middle) of a story, certainly doesn't make for *good* science fiction. A prize example of editorial "improvement" was the recent "The Lost Race Comes Back." That story, right up until almost the end, was very good, then the editor stepped in and rewrote the finish, making it into something not even fit for comic magazines. . . . We don't like the stories in the Ziff-Davis mags, nor apparently, does fandom in general. The Widner pro mag poll doesn't tell exactly where AS and FA stand in the eyes of the fans, since Art lists only the ten favorites."

ANOTHER brief quote from the column by Artiste reads as follows: "Krupa changes to Johnson in the latest AMAZING."

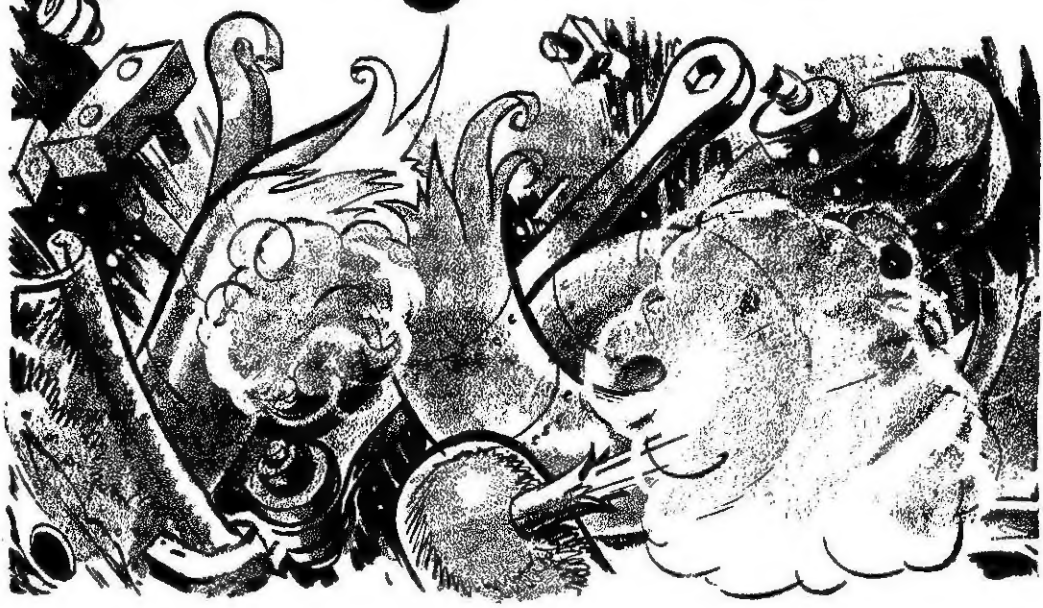
ANSWERING the latter we admire Artiste's imagination. For it *is* sheer imagination. Ralph Johnson is not Krupa. Who told you he was? Your editor received no letter from any columnist asking if this "news" was true, yet it is definitely stated as true, and artist Johnson is wronged with no chance to defend himself. Why not check these facts before you publish them?

We will ask Mr. Wilcox to write us a few words for publication in this column, as to what *he* honestly thinks about what editors do to him.

The Widner poll interests us. But since it is the opinion, even though it were unanimous, of only a few dozen people, it isn't logical to accept its results. We keep a close poll, and checked by circulation figures, we have an accurate guide. Several hundred thousand fans read our magazines, and when we conduct a poll, we get results from all walks of life and all over the world.

*(Concluded on page 61)*

# The Secret of



## by ED EARL REPP

**Dane Cabot was just one of many slaves of the dictators, but out in space was a secret that was the key to freedom—if he found it.**

"DAMN women, anyhow!"

Dark shadows of fury lay in the eyes of Dane Cabot as he throttled raw fuel into the humming rocket tubes. Leaping toward the stars with a wild burst of power the tiny space cruiser cast aside the gravity of the Earth as a dog shakes off water. Dane crouched sullenly over the controls, fingers claw-like on the accelerators. The power song of the rocket exhausts and the shrill straining of tortured girders were like cool water on his feverish nerves.

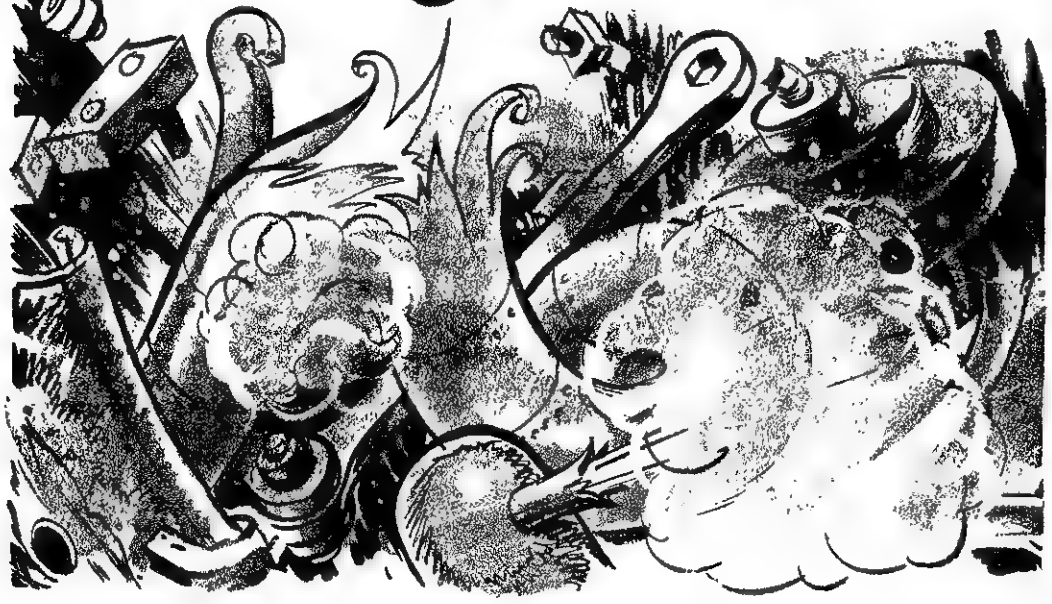
Furiously he drove on into the black depths of space. Buried somewhere in that measureless vacuum whirled the little planetoid, his goal. And in the very heart of it lay a cavern where he had found peace before, when his heart and brain were troubled beyond endurance as they were now.

An hour behind him lay Earth—and Brooke Loring. Brooke, with her laughing eyes and inviting lips. Brooke Loring, who cared not a tinker's damn for him! He knew that by the time he returned from Planetoid 88, if he ever did, she would be the wife of East Bayard — an important woman in the United Americas, mate of the man who was second in power of *The Hun-*

# Planetoid 88

Behind Cabot the walls collapsed with a roar of escaping air

# The Secret of Planetoid 88



## by ED EARL REPP

**Dane Cabot was just one of many slaves of the dictators, but out in space was a secret that was the key to freedom—if he found it.**

"DAMN women, anyhow!"

Dark shadows of fury lay in the eyes of Dane Cabot as he throttled raw fuel into the humming rocket tubes. Leaping toward the stars with a wild burst of power the tiny space cruiser cast aside the gravity of the Earth as a dog shakes off water. Dane crouched sullenly over the controls, fingers claw-like on the accelerators. The power song of the rocket exhausts and the shrill straining of tortured girders were like cool water on his feverish nerves.

Furiously he drove on into the black depths of space. Buried somewhere in that measureless vacuum whirled the little planetoid, his goal. And in the very heart of it lay a cavern where he had found peace before, when his heart and brain were troubled beyond endurance as they were now.

An hour behind him lay Earth—and Brooke Loring. Brooke, with her laughing eyes and inviting lips. Brooke Loring, who cared not a tinker's damn for him! He knew that by the time he returned from Planetoid 88, if he ever did, she would be the wife of East Bayard — an important woman in the United Americas, mate of the man who was second in power of *The Hun-*

Behind Cabot the walls collapsed with a roar of escaping air

*dred.* Dane could go back to prison. And when he'd paid the price of assaulting a leader, he would return to Chemistry House, where he was a Superior, and fool with his acids and test tubes and take orders from The Hundred.

But at least the agony was over. There would be no more scenes like that in Biology Station One this morning. A man can stand to lose a woman. What he can't stand is being tortured with the thought of losing her. Dane had so long feared that they would take Brooke from him, that now a strain of relief tempered his grief and fury.

THEY HAD STOOD ALONE on the top floor of the Biology Station this morning, the girl's eyes shining with eagerness, Dane's dark with a brooding bitterness. He had watched Brooke go near one of the globular incubators and stare at the embryo within, her lips parted and hand clasped against her throat.

"It's wonderful, Dane!" she breathed. "To think—that one of these incubators hold the man who will be the ruler of all the Americas some day! Doesn't it take your breath away?"

Her eyes reflected the shining columns of glass globes, each with its tiny atom of pulsing life within. The pumping and bubbling of a thousand artificial hearts throbbed in the room.

"With disgust—yes," Dane muttered. "Thank God I had a woman, not a fishbowl, for a mother. I can remember when having a baby was considered something sort of sacred. Now people go to Biology Stations to look at the embryos of their future offspring like a lot of sightseers at an aquarium."

Brooke turned on him, her eyes dark and angry.

"For that matter, I was artificially born myself. Most of the great men in this country were, too. It's been proven the best way from every angle."

"I suppose I should apologize for being normally born myself," Dane grunted. "But somehow, I'm proud of it! Brooke, I'm sick of all this! Sick of the Houses of Science, The Hundred, the Vedette, the Biology Board." His voice raised, and he tossed a hand at the ranks of gleaming incubators. "I've been told what I could and couldn't do for so long that I feel like asking permission every time I take a breath. And, Brooke—I'm through with it!"

"Dane Cabot, are you crazy?" Brooke said that in a tense whisper, her glance darting nervously to where an attendant had stopped in the act of reading the dials on an incubator to stare at them. "You could be executed for what you've said. If that workman heard—!"

Dane stared belligerently at the man, and the attendant's gaze dropped. But the young leader in Chemistry House had the good judgment to lower his voice.

"Let's get out of here," he grunted. "I only brought you because it was the quietest place I could think of where we could talk. The whole reek of the place nauseates me."

Brooke let him take her arm and guide her to the elevator. But there was resentment in the set of her features and the stiffness of her slender form. As they slipped down the long silver tube, Dane stared at her.

"I meant what I said," he clipped. "One fine day I'm going to get out of all this. That day isn't far off. The Hundred have given me their last order."

"How can you talk like that? You—a Superior in Chemistry House!"

"Superior to what?" Dane's laugh was harsh. "To the unthinking drones in the labs who drowse away the years

over test tubes and believe all the leaders tell them! What does my rank amount to? It means I take orders direct from The Hundred instead of through a stuffed shirt. But if I show signs of original thought, I'm classed as a reactionary . . . liable to be shadowed by the Vedette and executed on their testimony!"

"Even as your father and grandfather were executed before you?" Brooke asked acidly. "I should think it would be a warning to you. Or is anarchy ingrained in the Cabot blood?"

THE elevator sighed to a stop on the first floor. Dane's big hand reached out and he kept the girl from opening the door. She looked at him, frightened at the intensity in his eyes. Brooke Loring had seen pictures of Mortimer Cabot, his grandfather, and Samuel Cabot, his father, and the fanatical zeal of their features was Dane's now. At twenty-eight, Dane Cabot looked like his grandfather before him . . . a tall man, not a heavy one, with rather thin cheeks and touseled black hair. There was something very young in his face, something idealistic; and something very old in his shadowed black eyes. Looking at him, no one would have taken the chemist to be a happy man. Too often he had his hands shoved deep in his pockets, harsh lines drawing at the sides of his full lips, a frown creasing his brow.

Old Mortimer Cabot had been a fighter and a dreamer. Too much of a fighter. He was shot by a firing squad for organizing a revolution against the first Hundred back in 1956. Samuel Cabot was equally the dreamer and fighter. He lived to a ripe sixty years before he was exiled to an atmosphere-less planetoid to gasp out his life on a salt crag.

And now Dane, with the heritage of rebel Cabots in his blood, was inevitably drifting down the same tragic trail they had blazed. It was not a secret that he was on the "To Be Watched" list of the Vedette, the secret police. If Mortimer and Samuel had not both broken the law by secretly marrying the girls of their choice and having normal children by them,* Dane might have been a quiescent, studious worker under The Hundred.

It was Dane's complaint that a glass jar could not bestow much character on its offspring. For in him throbbed the love of freedom, rendered hotter by bitterness that stemmed from the things he saw every day of his life. And that bitterness was a galling flood in his heart at this moment.

His hands went down to grip Brooke by the shoulders.

"Let's stop k i d d i n g ourselves, Brooke," he said earnestly. "You know why I said I was ready to quit. I heard the news this morning. What I want to know is—are you going to go through with it?"

The girl's brown eyes fell, and she pushed back a curl that had strayed from the carefully upswept coiffure.

"I don't understand you, Dane. What —"

Deep hurt made Dane's eyes smoky.

"You understand me well enough! I want your answer right now? Are you or aren't you going to marry East Bayard?"

"It's for The Hundred to say . . . not me."

"You'd marry that arrogant snob?"

"Why not?" she flared. "What woman wouldn't be proud to be the wife of the future head of The Hundred? East Bayard is fine and strong, as well as a genius. He'll fill his father's posi-

*In this day of higher eugenics, the foetus was removed from the mother after the third month, to finish its development in an incubator.—Ed.

tion perfectly when Loren Bayard dies."

"Sure he will!" Dane scoffed. "Just the man to rule America. He's been raised for the job. 'By Loren Bayard, out of Ann Palfrey'; that's how I think of it. Bred. Like horses, or pedigreed dogs. Mentality from old Loren himself. Physique and strength of character from his mother's third-generation ancestors. And maybe a dash of cruelty and craft from some wolf who frightened the test tube that gave him birth!"

"Just the same, he's brilliant and strong and—"

"That doesn't enter into it!" Dane snapped. "Do you love him . . .that's the point!"

"No!" Brooke admitted it with a defiant lift of her chin. "After all, what difference does it make? Love won't produce perfect children, will it? It won't be of any help in the advance of the state, will it?"

The scorn in her eyes cut Dane to the heart.

"BROOKE, you can't!" he pleaded. "Remember — that first day — when you told me that some day we'd marry, no matter what The Hundred thought about it? Even if we had to run off to some other planet . . . !"

"That's not fair," Brooke snapped. "We were so young, then. I was just seventeen, an interne in Telepathy House. You were only twenty-one yourself. You can't hold a girl to a bargain like that."

"But I'm going to! Listen to me—!" Brooke winced as his fingers dug into her shoulders. Dane's black brows knitted and his eyes held an unnatural gleam. "We'll go to Venus, Brooke! I can get work as a technician in the mines there. We'll have a home, freedom—children!"

"Children?" Brooke struck his hands off and laughed mockingly. "One endless mess and bother! And what of my figure, man? As for keeping house—No, Dane. Even if I weren't to marry East, I shouldn't care to do that. Try to understand that it's over between us. I'm pledged to East Bayard. In a few months, you'll be pledged to some girl yourself. We're all finished do you understand?"

She opened the sliding door as she spoke the last words. The tall, heavy-shouldered man standing outside the elevator, wearing the white and gold of a member of The Hundred, must have heard her. At any rate, his arrogant features were blank with astonishment as the pair stepped from the lift.

Dane and Brooke both started. Brooke was first to break the awkward pause.

"You startled us, East," she faltered. "We didn't expect –"

East Bayard, sub-leader of the United Americas, began to smile, his eyes warming behind their thick, pinkish glasses. His face was not handsome, the forehead starting too close to his heavy brows and his nose flat and mashed-looking.

"Looks as though I almost missed you," he remarked. "I've been hunting you since the news came out. Anson just told me you were here."

Dane snorted, jealousy burning in him like sulphur. Jeffrey Anson was the head of the Vedette.

"So you keep the Vedette even on your fiancee!" he grunted. "If I couldn't trust a woman more than that —"

Brooke whirled angrily. But East Bayard laid a hand on her arm.

"The man's entitled to a little jealousy," he chuckled. "I understand Dane rather fancied a Loring-Cabot alliance himself. Losing a girl like you

was pretty bad luck."

"Where does luck enter into it?" Dane snapped. "Are you going to tell me the Biology Board didn't act on your orders?"

"Are you aware," the Leader breathed, "that you have just spoken treason?"

The calm superiority of him maddened Dane. Bayard towered unsmilingly two inches above the chemist, obviously conscious of his importance and strength. His mind and body were an endorsement of the new eugenics. Broad of shoulder and large of bone, long-limbed and cleanly built, East Bayard was everything, physically that his father, shriveled old Loren, was not. His brain had the razor sharpness of his sire, however, and experience would probably make him an even greater dictator.

But his attainments were gall to Dane Cabot. A species of insanity possessed him. It was not enough that he should shout: "Sure I'm talking treason!" He had to lay hold of the scowling giant by the collar and roar into his face:

"I'm aware of this, too—that the day is coming when a man can say what he likes about political putrefaction and no one will lay a finger on him. That's how it was seventy-five years ago, and it's going to be that way again!"

Bayard took it very calmly. The back of his white-gloved hand slapped across Dane's mouth, and he turned his head quietly to summon an attendant.

Dane moved without warning. His left hand ripped the glasses from the leader's face and his right fist came up to smash into Bayard's mouth.

With a grunt, Bayard went down. He lay there with his face blood-spattered, staring unbelievingly at his attacker.

"Get up, you overgrown ward heeler!" Dane snarled. "Get up and see how much pull you've got without the other Ninety-Nine to back you!"

BROOKE was screaming and tugging at his arm, and somewhere a guard blew a whistle. Dane didn't give a damn for all the guards and whistles in New York right now.

East Bayard scrambled to his feet. He let out a queer, choked sound and rushed. He had no science, but he had tremendous strength. With arms widespread, he made for Dane.

Dane laughed and stepped in. He slugged Bayard twice with his bony fists and moved away. Bayard, staggered, wiped blood from his face and peered from under matted black brows. Then his myopic eyes found Dane again. Swinging wildly, he tore into the chemist.

Dane's dark features broke into a wicked grin. He had boxing science from his father, and it took little of it to keep out of Bayard's way. He kept punching at that battered face, cutting it, slashing it, bruising it, until the leader seemed to keep on his feet by leaning against Dane's fists.

But the pound of running footfalls was a dangerous sound around the corner. Dane feinted the big man off balance. Then his driving fist plumbed Bayard's relaxed stomach. East Bayard groaned and doubled up gasping upon the floor.

Brooke's small hand slapped Dane's cheek.

"You madman!" she cried. "They'll put you in prison for this—perhaps execute you! And you'll deserve it!"

Dane's liquor of vengeance was down to the lees, but he drew one last draught before running.

"They've got to catch me, first!" he challenged. "Tell them I've gone to talk it over with ten thousand soldiers!"

That was a reference to the legendary

cavern of the Cabots, supposed to be the housing place of ten thousand soldiers in suspended animation, left there by old Mortimer Cabot. The "Sleeping Army" they called them. The words narrowed Brooke's eyes. But she stood silent and pale as Dane darted away and disappeared out a side door.

His small strato-cruiser was in the field beyond the building. He reached it on a dead run and plunged inside, to lock the door and snap to the controls. He flew the ship low, forestalling effectual pursuit. Now that the tumult inside him was dying, he realized the position he was in. He had assaulted a Leader, and that could mean prison or death.

Neither threat changed Dane Cabot's pulse rate. What did perturb him was the knowledge that death would write finis to his idea, so long cherished, of leading a revolution against The Hundred. Perhaps Dane was more of a dreamer than Mortimer or Samuel Cabot. He had dreamed much and done little toward bringing about the upset of the dictators. Mortimer Cabot, legend said, had formed an army of ten thousand picked fighting men, put them under suspended animation, and hidden them where seventy-five years of searching had never turned them up. Samuel Cabot had supplied great stores of armaments to the army.

Dane realized darkly how little he himself had done. But things were different now. There was no one to whom he could turn for help with his plans. The Hundred had carefully bred out of their subjects the germ of initiative. The people were in the habit of following the strongest leader, right or wrong.

Dane's thoughts were on the sleeping army as he started to drop to his home in the foothills. If anything happened to him, the ghostly troops would have the sleep of eternity. For only he—the last of the Cabots—knew the secret of their hiding place.

Dane came to a sudden decision. As he had turned to that cavern for solace so many times in the past, so he turned there now. The ship veered under his controlling hand, speeding toward the landing field where he kept his rocket ship. He spoke to no one as he landed and hurried to his private hangar. Rolling back the door, he shoved the small craft into the take-off trough. With only one backward look, he ignited the rockets and roared into the blue . . .

## CHAPTER II

### Last of the Cabots

WITH the need for action behind him, weariness suddenly descended on Dane like a sodden blanket. Excitement and hatred had taken their share of his strength. Setting the controls, he pulled the blinds across the ports and lay down on his bunk for a few hours sleep.

The soft ticking of the chronometer was the only sound when Dane awoke. His eyes turned sleepily upon it . . . then went wide. Twelve hours!

He stood up and stretched the kinks out of his long, hard frame. The rockets had been shut off by the automatic timing device. He strode to the controls and glanced at the direction indicator. Still on dead center.

So for another eighteen hours Dane kept the ship plowing through the purple, star-frosted void. To forestall pursuit, he forsook the usual route this time, plunging recklessly through the meteor-infested region marked in red on all space charts as "The Quicksands." Danger sprang upon him a hundred times, but Dane's hand was ever ready at the controls.

And always, when his mind was not

busy, black thoughts came to devil him. Stubbornly he refused to realize it was all over with Brooke. He relived those young moments when they had first fallen in love. He had to smile, realizing that once he had thought it was Brooke's brilliant mind he loved. He knew enough of life today to know that when women were as beautiful as she, it was their loveliness men fell in love with, not their intellect. But Brooke Loring had both. And because she was able to think for herself, he told himself she must some day see how wrong the system was.

Then finally, the ship was sliding into the conical, black penumbra of Planetoid 88. The dead world leaped toward him. Opening up with a booming roar, the bow rockets bucked savagely against the vessel's forward drive. Dane's safety belt cut painfully into his stomach. Muscles strained as he levered himself back into the seat. His eyes searched the landscape ahead. Familiar in their gaunt barrenness, the grim snag-teeth of 88's sunless crags reached up to claw the bottom out of the ship. Gravity landed heavily on Dane's lap as he zoomed the craft out of danger.

The ship flattened off now, and the rockets' staccato explosions kept it motionless above the mountains. Dane twisted to look down, studying the frozen landscape. The planet was tiny; he could see the sharp down-curve of its horizon, scalloped with broken mountains of rock. Frowning, he searched for the crater of a mighty volcano, towering above all other landmarks. After a moment he located its familiar crag. The ship went into a long slope, as Dane pressed forward to stare.

The crater blanced on a tightrope between shadow and light. Sunlight streamed into it at an acute angle, casting weird shadows into the cone. Northward were the everlasting stretches of blazing desert; southward, the hills of granite and ice. Dane cut the fuel and sank beyond the crater's rim.

Rising swiftly all about, the craggy walls of the dead volcano seemed to tumble in upon the ship. Dane had that same feeling of repressed fear, of stark loneliness, that gripped him whenever he visited the caverns. The faint light exaggerated the hollows below his cheek-bones, deepened the cleft of his square chin. His two-day-old beard stood out like a smearing of grease paint over his jaws.

Then there was a thump against the floor. The cruiser had come to rest on the layer of glassite that roofed the caverns.

DANE came quickly to his feet. Donning helmet and space suit, he stepped out of the ship. Eighty-eight's incessant gales howled about him, making progress difficult. He leaned against the shrieking wind, skidding and stumbling over the glass until, at the pitted wall of the crater, he found the air-lock. His mailed hand released the catch-bar. He lunged into the shelter and re-closed the door. After opening the door to the caverns, he removed his suit and helmet and began a winding descent through the lava-rock tunnel.

At the door to the weird barracks, he paused, strange fears gnawing at his heart. The sepulchral quiet lay heavily upon him. The dry chill of the air brought goose-pimples to his flesh. Sternly, he clamped his jaws and turned the knob. The door flew open—and Dane froze. He had known what to expect, but even so the sight knocked the wind out of him.

Stretching away until its endless ranks were lost in blackness, a vast army of blue-clad warriors saluted him. Over each man was a glass shield like

the cover of an old-fashioned clock. Captains stood at attention before their companies. Majors stood stiffly a few paces ahead of the captains. Top-ranking officers faced the blue-and-gold horde in stern-faced rigidness.

Two thousand white-gowned nurses had their places at the far wall. Ambulance drivers, orderlies, space-ship pilots and quartermasters flanked the fighting troops on the other side of the cavern.

One hundred men wide, one thousand men deep, Mortimer Cabot's warriors from seventy-five years in the past held the posts they had maintained for three-quarters of a century. Their rifles were at their sides. Packs were across their shoulders as if they were on the point of marching. Their brass was highly burnished and fresh polish gleamed on their shoes. A hundred-thousand sleeping soldiers!

And over it all lay silence, musty and inviolate since the men had marched to their posts and raised their hands in salute. Suddenly Dane shuddered. To break the clammy hold awe had on him, he took a deep breath and went forward.

Like a general inspecting his troops, he passed slowly down the front line of warriors. He peered into their faces, met the stern glare of their eyes. Something of the fire in those eyes entered his being. A thrill of pride shook Dane. These were indeed men from the past! Men whose set jaws and clear eyes spoke of the love of freedom. Men who had sacrificed wives and families, that they might sleep until some far day when they would be needed.

Thirty minutes had ticked through the caverns when Dane tore himself from the main room and glanced briefly into the store-room filled with munitions and antiquated rocket ships. As he finished his tour back in the barracks, he was conscious of a new exhilaration flooding him. If he had formerly been undecided as to whether to risk death by returning to Earth, there was no such indecision in him now. He had a duty to mankind and these waiting thousands. Personal danger was a factor that did not count. He had delayed too long already.

He would go back, let them jail him for a few months, and come out to begin his campaign. Execution was an improbability. He had a few influential friends and Brooke would certainly speak for him.

Dane was wrapped in warm thoughts of the battle ahead when he heard the rasp of a man's breath behind him. For a moment, shock threw its icy chains about him. Then he was whirling with every muscle taut and ready.

## CHAPTER III

### The Golden Man

WHAT he saw brought an angry grunt from his lips. For the fraction of a second he thought it was East Bayard who had followed him here. The man was burly, black-haired, white-and-gold clad. But a blue scar across his chin instantly marked the man for Dane. Jeffrey Anson—head of the secret police!

Dane had no time to wonder about the whys and hows of Anson's tracking him. The Vedette Chief had his gun raised for a clubbing blow and his big body was crashing in upon the rebel. Dane's shoulder went up to shield his head. The gun-butt cracked sharply against his collar-bone. Pain stunned him, and before he could fight back, Anson was bearing him to the floor.

Bulky, two-hundred-pounder though he was, Anson was lithe as a panther. One powerful knee slammed into

Dane's stomach, flattening him. His left hand clutched Dane's throat and with his right he lifted the gun.

The Vedette leader's lips slipped back in a grin.

"Led me a merry chase through the Quicksands, Cabot!" he panted. "But you're going back in cold storage this time!"

The gun came slicing down. Dane's sinews bunched, and he moved aside just as the gun grazed his ear. Anson swore and tried to catch his balance. But the lighter man slapped the heel of his palm beneath his chin and hurled him on his back five feet away.

Anson's swart features blackened. He sat up, shifted the gun and brought the shining barrel in line with Dane's chest! The rebel heard the roar of the weapon as he ploughed forward, felt the sting of lead score across his back. Behind him there was the crash of glass, and one of the soldiers crumpled within his transparent bell.

Then for a slugging, cursing sixty seconds the two men were locked togethered, the Vedette chief fighting to bring his gun into position, Dane holding his wrist in a grip of steel, battering at his face with his free hand. Sweat oozed from Anson's dark face. The cords of his neck stretched tight under firm skin. He clawed at Dane's face, trying to gouge out his eyes. If he had intended to take his man alive a moment before, there was no such intention in his mind now.

Dane knew that he was not fighting for his own life alone. A hundred thousand fighting men watched the battle with staring eyes and would have known, had they been conscious, that it was their lives Dane Cabot was defending.

Straining, stumbling, they fought back and forth through the ranks of sleepers. Now and then a glass dome would be overturned and shiver to splinters on the stone floor. Then one more soldier would be stretched out in the sleep that knew no waking.

But the deadlock had to end. The driving power of Anson's body was not a match for desperation that hurled Dane savagely ahead. Anson's gun-wrist had been bent back to the breaking point when disaster struck without warning—and its victim was Dane. His heel struck a spot made grease-slick by a smear of blood. In a flash he was slipping to the floor. Anson shouted with triumph. Cruelly deliberate, he selected a spot on Dane's breast and sighted along the barrel of his gun.

Then something happened that Dane Cabot was not to understand for many weeks. The hammer of Anson's weapon was inching back, and Dane could see the slight wincing of his eyes as they anticipated the flash.

In the next moment the golden man was standing before the Vedette chief. His tall, thin form obscured half of Anson's body from Dane's view; but all of Anson could be seen through him, as if he had been made of thick, translucent glass. He wore a shining uniform of shimmering gold flakes. He had a strange weapon in his hand, and he spoke in a voice so sharp, so full of menace, that Dane shuddered.

*"Anson! Drop your gun!"*

ANSON now saw him for the first time. He started, swung the gun. Fear struck through his features, loosening his jaw. His head craned forward.

"Who—what are you?"

The golden man ignored the query.

"You won't be warned again, Anson," he repeated. "Drop it!"

Watching the Vedette chief's eyes, Dane saw them search the stranger's features. Abruptly, Anson's eyes squint-

ed, as they had done when he was about to shoot Dane, before.

In the next moment they squeezed shut entirely, his face screwing up as a man's does when he is undergoing extreme agony. His fingers opened, quivering, to let the gun drop on the floor. Dane could see, now, the smooth hole burned in his breast, as if a two-inch drill had bored through him. The nauseating stench of scorched flesh reached his nostrils.

Jeffrey Anson slumped to the floor. The golden man pivoted swiftly, motioning Dane to rise.

With his shocked gaze on the man's face, Dane slowly got to his feet. He saw a long face with piercing amber-colored eyes. The mouth was sensitive; the features almost spiritual in their delicate molding.

The man spoke as he put his gun into a sheath.

"What madness possessed you to come here at a time like this?" he demanded. "You knew they watch you night and day!"

"But —what — I mean —who — are you?" Dane creaked.

"Never mind that! Come closer."

Dane found himself moving toward the golden man. Found himself in the grip of those hypnotic eyes as they came face to face. The whole visage of the man seemed to become hard and glittering, like polished brown granite. Dane was helpless to move.

"I have watched you for many months, and I have not been pleased with what I have seen. You have let your heart interfere with your work. You are far superior to the irresponsible drones who compose most of the American people, but you have done no more toward completing Mortimer Cabot's work than they have."

A shameful flush dyed the chemist's cheeks.

"I—know," he muttered. "They—well, it's hard to work, knowing the secret police are watching you all the time."

"It was hard for Mortimer Cabot to work, too, but he didn't let the Vedette frighten him!" Dane squirmed; then the golden-clad man went on. "There is another who is not pleased with you. Samuel Cabot, your father!"

"My father!" The words were in Dane's mouth, but they were never uttered. The tall man raised his hands and placed a forefinger against each of Dane's temples. All at once the walls of the cavern rolled back, and he seemed to be standing on an eminence at the center of a deep, round valley almost like a crater.

STEEP cliffs shot up on every side. At the bases of these cliffs were immense taluses of broken rubble; just clear of the taluses, the buildings began. They covered every square foot of the valley floor, with only narrow alleys between them. All of them were of stone, makeshift-looking affairs hastily thrown up.

Dane slowly turned to look behind him. What he saw deepened the puzzled scowl on his face. A great, brass bowl rested on stone columns fifteen feet off the ground, a series of pipes running from the bottom of it. There were a score of glass vats filled with red liquid and connected with the pipes. Then Dane saw the little group by one of the stone columns.

They numbered about ten. There were five men who resembled the golden man, clothed the same and alike translucent. There were several women, in the midst of them a tall, fair-haired girl who was smiling at Dane. And in front of them all . . . Dane's father.

"Dad!" Dane hadn't said that word

in fifteen years, and it was almost like a sob. But Samuel Cabot, tall, hawk-nosed, white haired, appeared not to hear.

"Have you forgotten the dream of the Cabots, Dane?" he asked sadly. "We are relying on you, but so far you have failed us. Time is growing short. In a few months these cliffs will crumble, this valley fill with heaps of broken rocks, and all will be over. Only you can help us!"

"Where are you, Dad?" Dane cried aloud. "How can I help? Who are the people with you?"

"We are ready to leave this dying planet for Earth," the older Cabot went on somberly, ignoring him, "but you must pave the way for us. The Hundred would never let us land in peace. A million lives depend on you, Dane! You must organize resistance against the dictators. Prepare the factories and power-plants for mass sabotage. Be ready to destroy all munition dumps and dynamite their subways and air-bases. We will know when you are ready, and will come."

He stepped back beside the dark-haired girl.

"Good-bye, Dane!" God be with you!"

"Wait—!" Dane ran forward, his hand upraised. Then the valley faded from his view, and there was only the echoing of his voice through the caverns, mocking him. The golden man was gone too. He was alone with the sleeping army.

## CHAPTER IV

### Doom of the Rebel Clan

THE chill air of the caves stole into Dane Cabot's heart. Alone and frightened, he stood there. He pushed stiff fingers through his hair. His first panicky thought was that he had dreamed. Proof to the contrary lay before him. Jeffrey Anson made a very realistic corpse.

Samuel Cabot's words still echoed in his brain. "A million lives depend on you!"

Yes, but who were the golden people? Where was his father? Hadn't they left him to die on a chunk of rock in space, fifteen years before?

All at once an acute need for getting out of this hall of horrors seized Dane. He leaped over Anson's body and sprang toward the stairs. Common sense forced him to return, take Anson by the heels, and drag him up the spiral stairway. With fumbling fingers he got into his space suit and rushed out, dragging the dead man with him.

Eighty-Eight's thin atmosphere leaped upon Anson's body like a pack of wolves, cold and swift-freezing. Thus Dane solved the problem of having a decaying corpse on his hands when—and if— he returned to the cavern.

There was nothing to hold him any longer. Perhaps in the confining quarters of the rocket ship he could marshal his wild thoughts. He hurried into the cruiser, rose from the crater, and roared back into the void.

Before he had covered half the distance back to Earth, he came to the conclusion that he had not dreamed and he was not crazy. His father was alive. Where, he couldn't guess. Just what his strange admonition had meant, he did not fully realize. But he knew there existed somewhere a whole world of sub-surface activity in which he, unknowingly, was the central figure!

Dane took a load of uncertainty back to Earth with him, but he took something else, too, a challenge that like a stinging lash: *"We are counting on you, Dane!"*

Not until he was nearing the great,

green globe that was his own world did he think of Jeffrey Anson again. It was with a grim smile that he pondered the consternation his disappearance would cause. Gnarled, gnome-like Loren Bayard had banked heavily on Anson's brains. Anson had that fox-like cunning that got results in tracking down reactionaries.

Dane looked down, measuring his distance from the sleek blue expanse of the Atlantic, shining miles below. He tilted over and dropped swiftly.

A warm feeling of satisfaction pulsed his body. With Anson out of the way, his road had one gigantic stumbling block removed from it. He wondered how long it would be before they knew he was not coming back again. At least, that was one job they could not pin on him! He foresaw a stretch in Central Detention for the beating he had given East Bayard, but, strangely, that prospect cheered him somewhat. Four or five months to map out his campaign and compile a list of possible accomplices. The time wouldn't be wasted.

Land came rushing up at him. His eyes found the ragged gray outline of New York City. Dane sloped for the landing field in the mainland foothills. With a little tug at his heart, Dane thought of Brooke down there in the city. He wondered if he must always be fighting his battle without her. Then the field shot up at him, a brown square coming out of greens and grays. Under his skillful hands the rockets coughed a last blast and went dead. Gravity repulsors commenced to throb, bearing the ship safely to earth in strong, invisible arms.

As the cement grated under his feet, Dane stood up and stepped out. Breathing deeply of the fresh, clean air, he stretched mightily. And then, sidling out of hangars, slipping from between buildings, he saw them coming . . .

Gray-uniformed policemen, each carrying a wicked-looking automatic rifle. Like gray wolves they closed in on him, the sunlight catching blue glints from their weapons. A shout broke the unnatural hush.

"Put up your hands, Cabot! You're under arrest!"

DANE thought in a stunned sort of way: "They're being damned cautious about an ordinary assault-and-battery case!"

He obeyed the order, standing tall against the shiny side of his ship. A big, red-faced officer came up to him and shoved the rifle in his stomach.

"Where's Anson?" he snapped.

Dane looked blankly at him. His stunned gaze traveled over the others, who were closing in.

"Anson?" he muttered. "What about him?"

"Where is he?" barked the officer again. "The last we heard of, he radioed back from the Quicksands that he'd picked up your trail. Where is he now?"

Dane Cabot's brown, lean features did not alter. But inside him there was a block of ice that included his stomach and heart and was spreading out with each passing second. He drew on all his self-control for the strength to reply calmly.

"I don't know. I haven't seen him."

"Ahh!" the officer spat disgustedly. "Put the cuffs on him, George. We'll see what they can do with him at Central Detention!"

That was the way Dane learned that he had already made one mistake. The mistake was forgetting that the Vedette carried trans-patial radios in their pursuit ships. So the whole world knew Anson had been closing in on the rebel when the static barrages of the Quicksands cut short his broadcast. That

much they knew; and the murder of Jeffrey Anson, they inferred.

New York had the news in ten minutes. The rest of the world knew of Dane Cabot's capture in an hour. Newsreel cameramen and radio announcers bustled in the street before the towering red structure which housed Central Detention when the patrol car stopped before it. Curious thousands fought with policemen to get a look at the rebel as they hustled him up the steps. Ropes fenced off the grim red building. The clamor of thousands of shouting voices beat against Dane's ears.

But Dane did not hear them. His whole being was paralyzed. He was tasting the bitter gall of defeat. A single voice whispered to him, taunted him over and over until he was half mad: *"We are counting on you — we are counting on you!"*

They threw him into one of the big, frosted-glass cells. Reporters milled about him, deviling him for a story. Then policemen began to cuff him about and shout at him: "Where's Anson?" Dane kept a stolid silence, even while blood trickled from a split lip and his head hummed from a black-jack blow.

A few minutes later the crowd was driven from his cell and twelve grim, hard-faced men in civilian clothes stalked in. Dane saw the twelve-pointed gold stars on their sleeves, and his jaw went hard.

"The Vedette!" he groaned.

Marcus Baring, acting secret police head, stepped before Dane. He was an undersized, hatchet-faced man, with gaunt cheeks and small eyes as hard and black as obsidian.

"Ready to talk, Cabot?" he barked.

"I've got nothing to confess," Dane replied stubbornly. And all the time he was thinking: *Don't let them pry it out of you! Don't open your mouth even if they cut you into a thousand pieces!*

Baring's mouth twitched. He jerked a thumb.

"Take him upstairs."

At the end of the hall an elevator swallowed the thirteen of them, and they shot up forty or fifty stories. Baring led them down the hall to a plain door. He threw it open, and Mapes, a blond husky, shoved Dane inside. The prisoner took one look at the man who stood in the center of the room. Then his heart sank within him, and he knew too well what was ahead.

The man who awaited him, smiling cocksuredly, dangled a leather belt in his hand, the buckle swinging free. It was East Bayard.

"IT LOOKS like the game's up, Cabot," the big Leader said cheerfully. His lips were still puffed from the beating he had taken at Dane's hands. One eye was slightly discolored behind those thick, pinkish glasses of his. "Suppose you talk and save us all some trouble," he suggested.

"I told Baring I had nothing to say," Dane muttered. "That still stands."

Someone shrilled suddenly: "Strip him to the waist! This is time wasted."

From the corner came the old fox himself—Loren Bayard, Leader of Leaders, Master of The Hundred.

"I'm flattered!" said the rebel with a grin. "I've never rated more than a couple of Vedettes before."

Bayard stared at him without smiling. He was a man to whom humor was Quantity X. He had a sickly, twisted body that was not more than a rack of crooked bones inside his uniform. Wrinkled, white flesh covered his skull thinly. He had not a hair on his body. In the mask of lines and ugly features, his mouth was a small red hole, his eyes two burning green stones.

"Be at it!" Bayard whirled on his big son. "Why do you stand there, you

fool? Do you expect to get anything out of him without squeezing it out?"

East stared down at him, contempt lying close to the surface of his eyes. He nodded at Mapes and Baring.

"Take off his coat and shirt."

They ripped the coat from Dane's body, and shirt and undershirt followed it. Then a belt was looped securely about his wrists and fixed to a hook above the floor. Dane's toes just reached the polished marble.

The secret policeman stook back. East Bayard took a wide-legged stance behind the prisoner. His father moved nervously in the background.

"Where is Jeffrey Anson?" East shot suddenly.

"I don't know."

The buckle whistled through the air. The sound of men catching short breaths was heard. The buckle hit flesh with a solid slap. Blood welled slowly from a rectangle printed deep on one of Dane Cabot's shoulder blades.

Bayard's big arm drew back and the belt sang again. Dane writhed, the muscles of his back twitching. His eyes on the ceiling, he prayed silently for strength to keep his secret, even if it meant only carrying it to the grave.

Again and again the buckle slashed at the helpless man's white skin.

"Where is Anson?"

Dane's teeth sank into his lip, but he made no sound. After a moment East Bayard took off his coat and stood erect in his white silk shirt, perspiration making dark rings beneath his arms. The faces of the Vedette agents grew tense with anticipation.

So for the space of two horrible minutes the belt buckle did its cruel mangling work on Dane's torn back. Blood coursed down the flesh in bright torrents. Once, oddly, Dane thought of Brooke Loring. He wondered if she knew what was happening in here. He was glad she didn't have to watch. At last Bayard stopped, breathing laboredly. Perspiration streaked his face and matted his black hair, plastering his shirt to his chest.

Marcus Baring stepped to Dane's side and tilted a flask of brandy to his lips. Dane drank of it greedily. Bayard spun him around and gripped him by the throat.

"Where is Anson?" he shouted. "Where is the cavern? Who are your confederates?"

A queer croak came from Dane's lips. The Vedette pressed forward eagerly.

"—told you—nothing—to—say!"

Bayard stepped back, his square jaw hardening. He flung the belt into a corner.

"All right, Baring," he breathed. "Bring the salt—"

Baring stepped into an anteroom and came back with a sack of salt. Bayard took it and his hand dug up a handful of white crystals. Without a word, he flung it onto Dane's quivering back.

For Dane, there was one ghastly moment of exquisite agony, and then blackness closed about him.

## CHAPTER V

### "Tomorrow You Die!"

WHEN Dane came to, he was lying face down on a cot, his back covered with a thick layer of some soothing jelly. A burning pain suffused his whole being. He was afraid to move for fear of bringing on worse agony.

But through his misery coursed a clear stream of triumph. They hadn't got it out of him! Maybe he was basing all his satisfaction on the dream of a man who was dead these fifteen years, and a million souls who had never lived. But he was being true to that dream. His only regret was the fear that they

would kill him before he could help.

"The dirty whelps!" he muttered. "They'd cut off their right arms to find that cavern."

Dane's eyes swerved, as he heard someone move in the room. Then his heart gave a great bound, for it was Brooke!

She laid aside the book she was reading to hurry to his side at that first stir of movement. Going down on her knees by him, she groped for his hand. Those laughing, blue eyes of hers shimmered with tears, and her red lips trembled.

"Dane, Dane!" she sobbed, burying her face against his shoulder. "Oh, my dear, if I'd only known what they were going to do to you . . . !"

A lump moved up into Dane's throat. His heart was pumping as it had not done for many long months. He captured the girl's hand with his fingers.

It's all right, Brooke," he muttered. "Just knowing that you worry about me means a lot. You couldn't have helped anyway."

"But I could!" Brooke's head raised, "I still can help."

"Someone's been fooling you." Dane patted her hand. "The Hundred have only started. This time they're determined to stamp out us reactionaries for good. Once they learn my secret, they can safely dispose of me."

"No, Dane!" Brooke's brown curls shook. "All they want is the sleeping army. When that's destroyed, they won't be afraid of you. But while those ten thousand potential rebels are alive, the autocracy isn't safe. If you'll only tell them what they ask—"

"That's the one thing I'll never do." Dane's face froze. "Besides, how would I be saving myself if I did? They'd kill me as soon as they found the army."

"But I have their promise that they won't!" Brooke blurted. "Listen, Dane, I told you once I'd never run away with you; that I didn't love you that much. I found out these last few days that I—I love you enough even to do that!"

Remorse was in Dane's eyes as he shook his head.

"For both of our sakes, Brooke, I wish you'd said that sooner," he sighed.

"But it's not too late! East has promised to let you go if you'll only tell where the cavern is. He's willing to forget about Anson. If you'll just save yourself that way, Dane, I'll go with you wherever you ask! Tell them what they want to know. The day you're freed, we'll leave for some other world to start over again!"

Dane's eyes were on her distraught face, and his heart was sorely tempted. It was happiness she held out to him; and against it he had only forlorn hopes of eventually escaping to defeat The Hundred. But in the end he shook his head.

"I can't do it. I couldn't respect myself if I did, and neither could you. I'm sorry, Brooke. Guess I've got that rebel blood we were talking about."

Brooke stood up.

"I'm sorry, too, Dane," she said softly. Then she left.

FOR Dane Cabot, the next two weeks were a period of dreading torture and enduring it. The Vedette questioned him every three days, giving him time in between to work himself into a state of terror over what was coming next. Bamboo slivers were thrust under his nails and lighted. Patches of flesh were literally peeled from his chest. His hands were held over candle flames until the flesh charred and split.

How he held onto his sanity, he was never to understand. His sleep was horrible with nightmares. But bitter-

est of all was the knowledge that he had failed his father. He wondered if, wherever Cabot was, he knew of it yet.

In those dark hours there were only two gleams of light: Brooke's visits, and the friendship of one of the reporters.

Tom Benchley was a man of sixty, bald, red-faced, and jovial. He alone of the journalists questioned Dane civilly. He seemed to remember that a man is innocent until proved guilty, something the rest of the world was forgetting.

He was Dane's only friend at the trial, when it was finally brought three weeks after his capture. But his orphan opinions could not sway The Hundred, who sat in grim concourse within the Hall of Justice. Two hours of deliberation sufficed to bring in a verdict of guilty.

Loren Bayard minced out upon the dais, then, and pointed a long finger at the prisoner.

"You have been found guilty of assault upon a Leader, treason against the State, and the murder of Jeffrey Anson," he recited. "Have you anything to say before sentence is passed?"

Dane looked up.

"Yes! That for unadulterated beastiality, the Spanish Inquisition had nothing upon a modern court trial as we've seen it here."

The Hundred muttered angrily, and a stir riffled the taut surface of the courtroom audience. When he said nothing more, Bayard's thin, biting tones lifted again:

"Then I sentence you to death by electrocution, to take place at dawn—*tomorrow!*"

The Hundred slowly sank back. Dane turned away. The bailiff led him into the hall at the rear of the chamber and photographers surged about, clamoring for a statement and snapping flashlight bulbs in Dane's face. Tom Benchley was there, and somehow the cigar-chewing old reporter worked in beside him and accompanied Dane and the guards down the halls.

The cell-block was upstairs. That way the whole group proceeded. They came to the jail floor and stopped before Dane's cell. The newsmen were shouting now, realizing their last chance for a story from the rebel was nearly over.

It was then that Tom Benchley raised his hands aloft.

"Easy, boys!" he shouted. "You want something to print, and here it is. Say for Cabot that he'll never burn in the chair!"

Silence swept over the noisy reporters and the frowning guards. Dane blinked, puzzled by Benchley's words.

"What are you driving at?" one of the journalists demanded.

"I mean that Cabot's going to escape." Tom Benchley nodded soberly at the crowd.

One of the guards laughed.

"Yeah? When?"

Benchley dropped his big hands into his coat pockets.

"Why, off hand," he frowned, "I'd say right about now!" Then his big hands came out of his pockets and he was holding a hand grenade in each. One powerful arm knocked Dane behind him. "Stand right where you are, or I'll blow the whole bunch of us to Kingdom Come!" he shouted. "Cabot, there's a ship on the roof. Get moving!"

DANE was too astonished to make his feet move. One of the guards started for the reporter.

"You fool, they'll burn you for this!" he roared. "Give me those grenades!"

"I'll give them to you in the belly if you come any farther," warned the red-

faced news-hawk. He shot a glance over his shoulder. "Cabot, I told you to beat it! I can't hold them here all day. Get in that ship and make fast tracks away from Earth!"

With a start, Dane came to life. Excitement and gratitude so confused his emotions that all he could do was choke.

"You—you're all right, Benchley!" Then he darted toward the stairs.

He could hear the elderly reporter bawling threats at the guards as he sped up the stairway. Steps fell away under his flying feet by fours. He had put five flights under him when he heard two muffled explosions far below. Dane's lips stretched thin across his clenched teeth. Benchley was out of the way, now, and nothing but debris would slow down pursuit. Gratitude and wonder filled him. Who was Benchley, in reality, and why had he sacrificed his life for him?

Then, suddenly, the last flight of steps was before Dane, and he was springing free into the sunlight. In the middle of the wide, flat roof squatted a stubby little cruiser, of a type he had never seen before. But the door of it yawned invitingly. Dane sprinted across the roof.

Plunging inside the craft, he heaved the thick door solidly into its jamb and tightened the wing-nuts. Then he turned to the controls. He studied them. They were entirely unfamiliar. He saw no fuel tanks overhead, no rocket buttons. His trembling hands darted over gleaming levers, as though by touching them he could learn their purpose.

Faintly, through the ship's insulated shell, came the popping of revolvers. Dane's gaze flashed through the glass windshield. Vedette men and uniformed policemen were streaming like ants through the door, their guns flashing. Lead spattered against the glass and rang with high pings on the polished metal shell.

It came to Dane that the few moments Fate had granted him were almost at an end. Soon, heavy disruptors would be turned on the ship. He made a quick decision. Turning his back on the approaching guards, he began pulling at every lever on the switchboard.

All of them resisted his efforts. They were locked. Then Dane saw a master lever. Savagely, he wrenched at it.

That was all he knew for a while. Without a sound, the ship shot upward, and Dane landed on his head on the floor.

## CHAPTER VI

### Blind Flight

WAKING up with headache had become the usual thing for Dane. He had been slugged and tortured until his body ached from head to toe. His awakening in the mystery ship was no novelty. He still had his headache.

After complete consciousness came, he clambered to his feet and went to a port-hole. Looking back, he made out Earth, a rapidly shrinking green dime against the blue-black velvet of outer space.

Abruptly, Dane remembered that the ship was without a hand on the controls. Hurrying forward, he seated himself in the pilot's chair and took a long, pensive look at the complicated switchboard. A frown began between his eyes and soon his whole forehead was included.

"Whatever this ark runs on, it isn't gas, oil, or rocket fuel!" he muttered.

There were no fuel gauges, no petcocks. There was something that appeared to be a rheostat, but it was locked. In a small, glass-covered bowl,

the directional cross-hairs hovered about a red bead. Wherever it was going, the ship was going in a straight line.

Dane was about to give it all up when he saw a scrap of paper lying on the floor. He picked it up and read what was written on it. Then he leaned back in the chair and gasped.

"Well, I'll be damned!"

"Good luck, Cabot," the penciled note began. "I wish I were going with you, but it's not in the cards. Remember me to Sam Cabot, when you see him. Don't worry about the controls. The ship will get where she's going without any help from you.

Tom Benchley

P.S.: If you feel yourself going screwy during the next five days, try to figure out where you're going!"

The note slid from Dane's fingers. "Remember me to Sam Cabot—*when you see him!*"

Those four words scored themselves in fire across Dane's brain. Then his father was alive! Alive—and on some world just five days away from Earth!

Dane began to stride up and down the floor, in the grip of an impatience he could hardly control. The miracle of his escape was lost on him. His every thought, now, was for the things ahead.

A series of clicks caused him to turn hurriedly to the control board. Levers were snapping this way and that. After a moment they stopped. Dane tested one or two and found them locked.

It was a helpless feeling, like being caught in a runaway elevator. Dane resolved to learn more about the ship. If he had to land the thing, he wanted a speaking acquaintance with its workings. More, however, to keep his overwrought mind occupied than for any other purpose, he commenced nosing about the cabin.

He passed a puzzled hour studying it. He turned up only one clue. In the tail of the ship, welded smoothly against the wall, was a compartment to which all the controls ran. Within that hemispherical box, he knew, lay the secret of the ship's power. Dane eyed the combination lock enviously. For a moment he toyed with it.

Then, like a boy intrigued by a toy bank, he commenced twisting the dial and listening for the fall of tumblers. Something snapped inside it. Dane shook the lock violently, yanked at it. The lock fell apart in his hands.

A startled yell broke from his lips. He threw the lock from him as cold liquid spilled over his hands. But it was a tardy decision. Clouds of sparkling, amber gas were rolling from it and choking the cabin with sweetish fumes. Dane's hands steamed with the stuff where the liquid had wet them. He took an accidental draught of the gas into his lungs.

With the first contact of the vapor on his nostrils, peace flooded Dane Cabot. There was not an ache or pain in his body. His mind was utterly at peace. To lie down and sleep seemed the most natural thing in the world. Dane did it.

HE had no inkling of how long he slept, but when he came to he felt better than he had in weeks. Save for the gnawing of hunger-pangs, his body was completely at par.

Gradually a tinkling sound broke into his drugged consciousness. He realized it was this noise, repeated over and over, that had awakened him. He sat up, where he lay on the floor, and stared about him.

Then, he saw a red light frantically glowing and ebbing over the controls, in time to the tinkling of the bell. Dane ran forward and peered through the

windshield. On the hard surface of his eyes was mirrored the sight that he saw: A great ball rolling majestically through the heavens; a cloudy sphere ten times the size of Earth!

Dane sank into the chair. What world was this? His glance dumbly took in the fuzzy outlines of it. He could feel its terrible gravity seizing the ship. Four great stripes of brownish gas belted the body. Then Dane saw a gaping red hole on the far horizon, and suddenly he knew. This was Jupiter, the planet of Great Red Spot.

But surely this couldn't be his destination; Sweat-droplets burst out on Dane's forehead. Had the robot ship wandered? Jupiter's gravity would crush a man as surely as if he were under a hydraulic press.

The world of gas and fogs rolled nearer. Dane could see down into the ugly red crater, and the sight made his flesh crawl. The Red Spot appeared to him like a cancer on Jupiter's barren surface; as big as a continent it was, and unfathomably deep.

A voice broke through the ringing of the bell:

*"The controls are now unlocked. You will land the ship yourself. The largest lever is the accelerator. Determine the use of the other levers by testing them. You will land on Io, nearest to Jupiter of the major satellites. At this time Io should be directly above The Great Red Spot."*

Somewhere in the ship an electrical contact broke, and the voice died.

Dane's hands leaped to the levers. He twisted the accelerator. The motion caused the cruiser to leap ahead. Dane slacked off on it and tried the other controls. The system was simple; a few moments and he was eagerly swinging the ship toward the Red Spot.

Against the raw scarlet of the crater he made out a small moon swinging through its orbit. Dane drove the ship forward. Io swelled rapidly, until he was slowing above it and scanning, through floor-ports, a jumpled world of broken crags. Where, in that basalt jungle, Dane wondered, would life be found?

Slowly he circled the satellite. His eye finally picked out a spot of greenery. Stopping directly above it, he let the ship drop. The green spot grew into a mighty valley hemmed in by towering scarps. Now he could make out buildings that seemed to cover almost the entire valley floor. Then a hummock that rose from the middle of the city, and on the top of it—

Dane uttered a startled gasp. It was the city of his dream! The same great bowl supported by stone columns. The same ramshackle houses. The same glass vats of red liquid in the shadow of the bronze bowl. And, in an excited cluster—*the same group of people he had seen!*

HE forgot caution and dropped the ship so fast it bounced on the ground. He tore the door open and sprang out. A giant hand seemed to pick him up and hurl him twenty feet into the air. He had forgotten the reduced gravity of the tiny world. When he came down, men and women were running toward him. At their head was a spare, white-haired figure Dane could never forget.

For the next thirty seconds, neither Dane nor his father had a voice to speak with. For Dane, it was a meeting he had never dreamed possible. To Samuel Cabot, the moment meant the culmination of fifteen years of waiting.

At last the old man held him back at arms' length. His leathery cheeks were wet with tears he didn't attempt to hide.

"Fifteen years, Dane!" he mur-

mured. "You were a boy then, but you're all man now. We're proud of you!"

"Proud!" Dane replied bitterly. "I've failed miserably. But you, Dad. They left you to die on an asteroid with a week's supply of oxygen. . . ."

"The Cabots have a guardian angel," Cabot chuckled. "Dane, meet Kris. He saved my life, and I understand he did you the same favor a short time ago."

The golden man came from the ring of onlookers. Smiling, he put his hand out in the gesture of welcome Samuel Cabot had taught the Ionians. He wore the scintillating uniform of gold scales he had worn in the cavern. The weird translucency of his skin still gave Dane a slight shudder. But the hand the Earthman took was warm and strong.

"I didn't get a chance to thank you," Dane grinned.

"It wasn't necessary," Kris shrugged. "Fortunately for all of us, I was in the cavern when you and Anson arrived, examining the antiquated rocket ships to see if they could be converted. I didn't find the answer to that, but I should say that my trip was far from wasted."

A girl's voice said petulantly.

"Kris! Are you going to keep our guest to yourself?"

Dane turned, to look into the eyes of the girl who had stood beside his father in the dream. In that moment, Brooke was far, far from his thoughts. Here was beauty to rival that of any Earthwoman.

Kris laughed.

"One would think you'd been waiting for this fellow, Margo! Careful you don't send me into one of my jealous rages! Dane, this is Margo—my fiancee, and princess of Io."

More eagerly than he had intended, Dane clasped her slim fingers in his hand. He murmured something, and kept on staring. Margo's beauty was of a quieter type than Brooke Loring's. Brooke's beauty drove men to all kinds of vainglorious escapades. Margo's would have made the same men seek her love in less showy, but more profitable, ways.

Her cool, gray eyes met Dane's and her grave lips were smiling. Blond hair was combed from a creamy forehead across which she wore a thin band of gold. Suddenly, spots of color showed in her cheeks and her glance wavered. It was that ruddy glow beneath her skin that made Dane notice that her body was not transparent, as was Kris'. And, looking about, he discovered that only a half-dozen of the men present possessed that weird characteristic.

DANE turned back to his father.

"A friend of yours sent his greetings," he said, frowning. "Do you remember Tom Benchley?"

"Tom and I graduated from Cornell together," Cabot told him. "For the last ten years, he has been one of the four men on Earth upon whom I could rely. It was Tom, then, who furnished you with the ship?"

Dane nodded. Briefly, he related the tragic last hours he had spent upon Earth.

"I've got Benchley to thank for my being here at all," he finished.

Disappointment darkened Sam Cabot's face.

"So old Tom is dead. He was a fine, courageous worker—one of the finest. Tom has known of our colony here on Io for many years. He and each of the other two had one of these little cruisers. They were to keep them safely hidden, yet always ready for a getaway, should they be forced to flee."

"But Benchley chose to save me instead of himself," Dane said glumly.

"Those were his orders," said Cabot. "Right now you think very bitterly about your seeming failure. You mustn't, Dane. The fact is, you have been so closely watched that you had little chance to work. That is why you were never told of my whereabouts, for fear the knowledge might be tortured out of you. Yet we kept you on Earth when at any time we might have brought you here. There are few Americans left with the initiative that characterized the pioneers. You and Benchley and the other pair included the only ones we could fully rely on. And because in you flows the hot blood of the greatest rebel of them all—Mortimer Cabot—we sought to keep you on Earth to fight for our ends."

Dane smiled slowly.

"You're forgetting another great rebel, Dad. Old Sam Cabot hasn't done so badly!"

Cabot turned away with a grunt.

"He hasn't done so darned well, either. Come along. You'll need a shower and some food after five days in that animated cannon-ball."

Kris winked at the younger man, and Margo laughed softly under her breath. Between the two of them, then, Dane followed his father down the winding stone stairway from the hill-top.

## CHAPTER VII

### Dwellers of the Dying World

DANE'S room was on the top floor of a large, ten-story structure that housed the ruling body of Io. Kris had servants bring him clean clothes of the same type he and the other rulers wore. They consisted of a short, gold jacket, a lightweight silk shirt, and very full trousers of the same gold material. An added necessity was lead-soled shoes to prevent any more inadvertent high-jumping exhibitions.

Dane had a shower, the cool water seeming to give him back all the strength he had lost during the long voyage. While he dried himself he stood and looked out over the city.

An air of having been thrown up overnight lay over the buildings. The streets were crooked and winding. Many of the houses were in need of repair. Indeed, there were cracks in the floor and ceiling even of the House of Rulers.

Night came without warning to Io. In the thin atmosphere the sun's rays beat straight down; when the world rolled, the sun was blanked out almost instantly. There was one brief, brilliant flash of gold and red. Then night wrapped the city up in gray. And with the semi-darkness came sudden, bitter cold.

Standing at the window, Dane felt the sub-zero air sweep in at him. His cheeks tingled. His lips instantly grew stiff and blue. He was still standing in that startled attitude when Kris came into the room.

He laughed at Dane's plight.

"My fault!" he chuckled. "I forgot to tell you it grows cold rather suddenly here on Io. A moment ago our constant daytime temperature of seventy degrees existed. I think you'll find it's about sixty below zero, Fahrenheit, now!"

"I believe you!" Dane muttered. He dived into his clothing on the double-quick.

"We're dining immediately," Kris told him. "You'll join us?"

"I haven't eaten since that laughing gas of yours put me to sleep four days ago," said the Earthman grimly. "Lead away."

"I must apologize for that, too," said the tall Ionian. "Had you tampered with the controls, you would never have

reached us. The gas was insurance against that possibility."

The dining hall was on the roof, a sort of summer-house completely enclosed by glass and heated by bowls of red crystals set about on stands. No flames or smoke came from the crystals, but they gave off plenty of warmth.

The Ionians stood up as they approached. Dane was introduced to twenty people who occupied chairs about the table. Half of the men possessed translucent skin like Kris', and Dane wondered still more about it. Only two of the men impressed him deeply at that first meeting.

Nile Vanz, warlord of Io, was a brawny, deep-chested man who wore a military man's stripes and a hero's scars. His jaw was square and undershot; his cheeckbones high; his small, black eyes deep-set. A puckered white scar crossed his chin at a 45-degree angle. Yet, that weird translucency gave him a look of softness that Dane knew was not there. He had one question to ask Dane when they were introduced:

"What kind of fighters are these Americans?"

"Excellent," Dane told him. "Perfect physical specimens, intelligent, bred to savagery."

"But their battle manners?"

"The best. They're trained from childhood. Every man is a tactician. He'd sooner die than break a rule in the book. But since they are completely devoid of initiative, this is taken for granted."

Nile Vanz' right eye twitched.

"Fine!" he rumbled the word in a bass voice that came from the bottom of his chest. "Then we'll defeat them easily! Our attack will be so different from anything they've ever seen that their own tactics will cause their downfall."

THE other man Dane especially noticed was Tolek Serj. Serj was Margo's father. "Guardian of the Intensifier," was his title; the Intensifier, Dane found out, was the bronze bowl. He found out, too, that the title was purely honorary, and that all Serj really understood was Ionian wines. He was a pouter-pigeon of a man, weighed down by medals and dressed to kill. No one took him seriously except Tolek Serj. But Dane read genuine value in his character, and instinctively liked the little man.

Midway in the meal there was a commotion down in the street. The whole party rushed to the balustrade and looked down. Dane's eyes went wide at what he saw. A mob of at least fifty was attempting to storm the door of the rulers' house!

Guards kept them at bay with short rifles. Their Ionian shouts rang unfamiliarly on Dane's ears. The crowd surged restlessly, on the point of rushing the police. Then Margo threw the window open and her voice rang out over them.

Not a word of what was said was intelligible to Dane. A member of the mob shouted back at her, and Margo replied curtly. Dane got a chilling insight into the trouble when his father muttered:

"Third time in a week! We can't put them off much longer!"

"What does it mean?" Dane demanded.

"Unless we can show them some action mighty soon—it means revolution!" jerked the elderly Earthman.

Margo turned abruptly from the window. Her delicate features, nipped by the cold, were flushed. To Sam Cabot she said hurriedly:

"They promise a revolution unless we leave for Earth tomorrow! Another section has been buried by falling rocks.

What can I tell them?"

"Tomorrow—no! It's impossible." Cabot's hawk-nose grew red. "Tell them this: That we can leave in three days if they don't slow us up by constant bickering. That they'll have new homes on Earth in a week. But that if they kill us, they'll die right here in Good Hope Valley!"

Margo relayed the new promises. At last the mob, still grumbling, filtered back into the dingy streets from which they had come.

THEY went back to their dinner with less appetite. Margo picked distastefully at her food. Dane finally turned to her.

"This is the last livable place on your planet?" he queried.

"—and these are the last of the Ionians," the girl finished sadly. "There were eight million Ionians at one time. Falling mountains, starvation, and plagues have killed off seven-eighths of those souls. In a few weeks—days, perhaps—Good Hope Valley will be a vast graveyard, filled to the brim with stones. Io will soon have disintegrated completely."

Kris put in: "You see why we must conquer Earth. There is no other inhabitable planet, and The Hundred would certainly not hear of a settlement."

Sam Cabot was drumming on the table with his fingertips, scowling.

"There was a day when I should have died rather than take up arms against my countrymen. But that was the day of the true democracy. I tell you, Dane, that these poor people have a truer democracy than Earth has known in seventy-five years! We call Kris and Margo, Prince and Princess. That's a mere title. A vote of the people could oust them overnight. They hold elections every five years, and believe me there are no stuffed ballot boxes on Io. Every man appoints himself a guardian of the polls."

"Why haven't they elected new rulers, if they're dissatisfied?" Dane asked.

"Who would accept the job? Besides, they are inwardly certain that Margo and Kris and I, as their Triumvirate, are capable and sincere. But fear does terrible things to men and women."

"There's something I've wondered since I saw you kill Jeffery Anson," Dane said to Kris. "Why, if you have such deadly weapons, haven't you overcome Earth years ago?"

Kris winced.

"It would have been easy, of course. But the slaughter! Millions of soldiers, guilty only of following orders, cut down like cattle! Our hope has been for a bloodless revolution. Had we been able to arrange mass sabotage to paralyze every function of the nation, the people would have been easily molded to our ideas. But, now—"

Suddenly the fork Samuel Cabot was using dropped on his metal plate with a clatter. All eyes snapped to the elderly expatriate; and Dane glimpsed with cold shock his pallid skin and shaking hands. He was at his side in an instant.

"Dad! What is it?"

Cold sweat shone on Cabot's face and his lips were blue. He gulped the water Margo held to his lips. Then he fell back, whispering:

"Be—all right—a minute—!"

Dane glanced anxiously at Kris.

"One more reason we must leave, soon," grunted the Ionian. "Your father is radiation-sick. The Red Spot, you know."

Sam Cabot struggled upright and waved the worried rulers aside.

"It's all right," he smiled feebly. And

to Dane: "I'm afraid Kris is right. I wouldn't last much longer, under the Great Red Spot. These people are immune, but Earthmen become saturated with Mu rays after a few years."

"Even we can stand it only at a distance," Nile Vanz cut in. "I guess we won't forget our trip of exploration inside that red hell very soon, eh, Kris?"

Kris smiled ruefully and held up his hands. Light from a table lamp passed through them as a warm yellow glow.

"Not with this reminder! You see, Dane, before we learned the protective power of gold, we ventured into the Red Spot in rocket ships. It is from there that we get all our power, by condensing the Mu rays in the Intensifier; but we thought perhaps we could mine the Red Spot material. Our first inkling of what was happening to us was when Zanz discovered he was looking at the sights *through* me—instead of around me! So now it's easy to know any of the three hundred who went on that trek. They call us the 'Shadow Men'."

Tolek Serj, one of the few normal men present, grunted.

"Humph! A mark of distinction! A badge of valor!"

Dane was looking at Kris while he said that. He saw the rueful light in the Ionian's eyes. Glancing at Margo, he thought he knew the reason. In her face, as she regarded her fiance, was something of the same shrinking he himself knew when he looked at the shadow men.

The dinner ended on a minor key. Everyone was glad to hurry away, and Dane, back in his room, felt more pressed down by worry than he had since he heard sentence pronounced on himself in the Hall of Justice.

IT SEEMED to Dane that he had slept but a few hours when he came wide awake. Try as he might, he could not get to sleep again. Restless, disturbed, he got up and stood at his window, staring out into the gray Ionian night. Overhead, the Red Spot was in full view, glaring angrily down upon the dying world. Jupiter, giant of the Solar System, made a vast, gaseous roof above Io, stretching away on all sides to disappear in blackness.

Dane wished with all his heart for morning. Worry lost its acid sharpness in the warm light of day. Anxiety for his father, his failure upon Earth—these were but two of his dark strains of thought. But morning was far off. Io's sidereal day was over forty-two hours long. Night had twenty-one morbid hours with which to torment the dying world.

Movement brought Dane's gaze to the winding stone stairway below him, that mounted by terraces to the top of the knoll. He leaned nearer the window, caught by the familiarity of a hurrying figure. Then his eyes lightened as full recognition came.

Dane hurriedly changed night-clothes for gold day garments. Over these he threw a heavy cape of white fur. Fur boots went on over his weighted shoes. He donned the glass-faced hood that protected against frostbite.

He overtook Margo halfway up the stairs. She turned hastily at his approach. The dim light was sufficient to show the fear that sprang into her eyes. One of her gloved hands moved, and a pistol sprang into it. Then, recognizing him, she relaxed.

"Aren't you taking a risk out here, alone?" Dane charged.

"Perhaps." The girl's voice was muffled by her mask. "But it's better than spending a sleepless night in my room. I often come up here, just to look out over the city and wish we could have brought help years ago."

The avalanche engulfed the whole west end of the city

"I know the feeling." Dane replied darkly. "I've watched my own people sink into stupidity and ignorance and prayed for the power to help them."

They were climbing slowly, side by side, up the steps. The city fell away beneath them. Ahead was the looming darkness surrounding the Intensifier. There was no one at work when they stopped in silence in the shadows, but the overhead machinery throbbed and there was the dripping of liquid into a vat somewhere.

A few lights sprinkled the sleeping city. Margo extended her arm to point at a V-shaped gap in the black chain of hills across from them.

"There is the cause of tonight's trouble. Three hundred died in the landslide. A whole section was buried. That means more crowding up of the survivors, fewer hands to do the work already far too great for us."

"But think—in a few days all these terrified people can be moved away to a fertile world such as they've never seen!"

"I wish it were that easy!" Margo shook her head sadly as she said that, and Dane looked into her troubled eyes. "If we can take half of them, we shall have done well. We haven't the transport ships to carry over five-hundred thousand. Night and day, for two years, we've been laboring to build them. But we were starting from almost nothing. Our great ship factories were across the hills, and they're buried now. Buried with the three hundred transports we had completed. All we can do is take the people in two loads, hoping the second is still alive when we return."

DANE found no words to console her. But a warm sympathy drew him close to the girl. Sympathy—and something stronger. Something that made him long to comfort and protect her. Brooke had never aroused that deep, poignant yearning. And Dane understood why; he and Brooke had so little in common. He and Margo had had the same heartbreaks, the same trials.

Rather suddenly, Dane remembered Kris. Staring off into the darkness, he murmured:

"You and Kris, I suppose, will be married when the colony is established on Earth?"

Margo's reply was so delayed that Dane glanced quickly at her. The girl's eyes avoided him.

"Yes, I—I suppose so," she said at last. "Father loves Kris like a son. He wanted us to marry before we left. But Kris agreed with me that it was better to wait."

Dane recalled the look she had given Kris at dinner. Admiring . . . yet fearful.

In the next moment both of them were turning swiftly, as a foot rasped in the gravel. Apprehension chilled Dane. Kris had stepped out of the shadows behind them. His face was dark with fury, and his hand rested on his gun.

"Margo!" he snapped. "Why aren't you in your room?"

"Why should I be, Kris?" the girl countered. "I couldn't sleep. Dane came out because he couldn't sleep either."

Kris' thin features were sharp with distrust. Sarcasm whetted his words razor-sharp.

"Convenient! But I couldn't sleep because I saw the two of you leave together. So here *I* am. Is it your Earth-custom, Cabot, to try to steal the love . . ."

"Cut it out!" Dane cracked out the words and stepped close to the Ionian. "It happened just as Margo said. I'm

sorry if you think there's anything wrong. But I'm not apologizing for something of which I'm not guilty."

"We have strict customs on Io," Kris bit out. "Stricter than yours, it seems. If a man and woman leave for a shadowy trysting-place in the middle of the night, it usually means one thing—"

Dane's hand leaped up to seize the other by the throat. Kris darted back, pulling his disruptor in the same swift motion.

Without warning, a blinding spoke of light speared down from the night sky, illuminating the trio in a circle of brilliance. Dane's hand fell away. Kris lowered the gun. Rockets barked brokenly, and a long, silver shape began to drop.

In the next moment Margo was running back, screaming.

"Dane—Kris—an Earth-ship! *Io is being attacked!*"

## CHAPTER VIII

### Exodus

THE stark horror of that moment would never be forgotten by the three who watched a gleaming shell come silently gliding from the night. Against the Red Spot, it was limned like a giant shark darting to the attack. They could not guess how many more hundreds of ships had crossed the void with this first of a blood-hungry host.

Kris had his gun raised to fire when Dane's fingers clamped on his arm.

"Wait!" he cried. "It's not a fighting ship—it's a cruiser. She's going to land . . . not bomb us!"

A moment more and Dane's words were shown to be true. Lowering silently on invisible gravity repulsor beams, the craft settled beside Dane's little cruiser. No word, not a breath, broke the stillness as an air-lock hissed and the door slowly swung open. In the white glare of the landing lights, a girl stepped out and brushed her hand wearily across her forehead.

Dane frowned; then gasped.

"Brooke!"

The girl looked up. As she did so, her features, strained and weary, but lovely none the less, were illuminated. Dane experienced again that tug at his heart that Brooke's presence always called up.

Across the ground she came running to him, her arms outstretched.

"Dane!" The word was a choked cry.

Dane took the sobbing girl into his arms, deeply moved.

"What does it mean, Brooke? How did you find me? Why did you come?"

"Why did I come?" Brooke echoed. Her eyes searched his face. "Don't you remember I told you I'd go anywhere with you? But you escaped and didn't give me a chance. It's been ghastly without you, Dane. Not knowing whether you were alive or dead . . . "

"But how did you know where to come?" Margo and Kris had come closer to stare curiously.

"Tom Benchley left charts behind him, and I was the first to find them. I knew the Vedette would ransack his place, after he died, but I beat them to it. I was afraid he might have papers that would help them find you. He did, Dane. Charts of the whole trip out here!"

"Has the Vedette seen them?" Kris cut in.

Brooke's brown curls shook emphatically.

"I got everything out before they came. And I left immediately." Impulsively, her face tipped up to Dane's. "Oh, Dane—let's never be apart again for a minute!"

"No. No, of course we won't."

Dane's response was automatic. Inwardly, he was the prey of conflicting emotions. Resentment at Brooke's former treatment of him made him hold back somewhat. But there was the knowledge that she had deserted the world she loved, that she had left East Bayard for him. Those things crowded old hurts out of his mind. His arms tightened about her.

Suddenly he started.

"You're shaking, Brooke! Good heavens, I forgot you aren't dressed for this cold. Here—"

He had his own coat off in a minute and threw it about her. Then he hurried her off down the hill toward the Rulers' House. Margo followed quickly, solicitous of her unexpected guest's wants. Last to come was Kris, a frowning and a puzzled man.

TO ROLLED, and again a small, sickly white sun bounced above the jagged scraps. The new day was filled with plans, labors, fears. Samuel Cabot gave out word that the draft system would be used in selecting the first passenger list. Persons under the age of three Jovian years—thirty-six Earthly years—were the first to go. If there were room for more, they would be selected for their youth.

These five-hundred thousand would be carried in a hundred huge transports, approximately three thousand to the ship. Fifty thousand fighting men would man the ten great warships. From the edge of the huge square in the middle of the city, Dane watched the soldiers load the fighting craft. Nile Vanz strode about, shouting orders. He kept a staff of twenty-five orderlies on the jump every minute. And he got results. The warships' holds filled rapidly with food and battle supplies, with an astonishing lack of confusion.

Afterward, Dane went up on the knoll with his father and Brooke. Tolek Serj strutted through the intensifying plant, pompous and important. Dane had not seen Margo all day. He found her absence created a depression in him that even Brooke's vivacity could not erase entirely. Sam Cabot took them then through the plant and explained the work that was being done.

"Practically our only form of power comes from Red Spot concentrate. Without enough concentrate, our ships might easily be marooned in space forever. Hence, this fuss and bustle to cram the holds full of crystals."

Brooke's eyes shone with interest.

"How superior to our Earthly ships!" she marveled. "I suppose your guns are equally efficient?"

"Easily. If we are driven to it, we can annihilate all of New York in a few hours."

"When will we be leaving to attack?"

"I thought, before, the day after tomorrow. But Nile Vanz' tremendous capacity for organization makes me think we may be able to leave by noon tomorrow! That is, the warships alone, first. The transport-fleet will follow in a day or so."

Brooke regarded the fiery red vats with distaste.

"If only The Hundred will listen to reason! I should hate to see all those men and women butchered . . . "

"So should we all," Cabot said crisply. "But if Loren Bayard won't give up without a struggle—the blood will be on his hands, not ours."

Through that day and half the night the work went on. Six hours from

*This concentrate yields the deadliest explosive ever seen, a most savage destructive ray, and an ultra-efficient magnetic material. A charge of concentrate in stern and bow of a space ship creates a column of disturbed ionization extending in any direction the pilot chooses to send it. Up or down this column the ship climbs by a sort of magnetization.—Ed.

dawn, Samuel Cabot called a halt.

"Everything is ready," he announced. "We will rest until ten, and at noon we leave. Try to sleep, everyone. God knows we shall need all our faculties for the struggle ahead!"

But Cabot's plea was vain. With such a moment only a few hours off, who on Io could hope to sleep? Hours ahead of time, they were milling about the square.

Nile Vanz got his soldiers into the ten fighting craft somehow. Ships' crews stood at their posts awaiting the order to take off. Vanz portioned the rulers off into different ships.

"We can't risk losing all our leaders in the destruction of one ship," he explained. "Tolek, you and Samuel will command the *Valiant*. I'll take Kris and young Cabot with me." He divided the rest into teams.

It was almost the last move before their departure. Margo and Kris spoke over the amplifiers to their people. Then the shining belly of the *Orsis* swallowed them and they reappeared behind the port of the flagship. Dane tried to think that it was the departure that made his heart light. But actually he knew it was that he and Margo would be in the same ship. Crewmen scrambled up after them and threw off lines. They hurried forward to the top deck as bells rang up and down the ship. Standing against the thick glass window, they looked out upon the people far below, a strangely quiet crowd. From ship to ship flashed the ready-signal. In the bow of the *Valiant,* Serj and Sam Cabot waved.

And now all sounds were hushed within the *Orsis*. A trembling passed down its sleek length. Slowly, silently, gathering speed, the warship rose from the square. The city dropped away. One by one, the other nine ships arched into the sky. A moment later, Io was a tiny speck in the stern ports.

FOR an hour the fleet was fighting the persistent gravity of Jupiter. As the drag was shaken off, the fighting craft hurled themselves forward, faster by the second. Silent as silver needles piercing space, they shot for Planetoid 88. It had been decided that the sleeping army would be picked up on the way. While the men's equipment was old-fashioned, it would do until more modern weapons could be provided. An army of occupation was a necessity, and the Earth-soldiers were best suited for such duty.

Two sleeping-periods passed. The *Orsis* churned on. Margo, Kris, Brooke and Dane were on the forward observation deck when the first inkling of disaster threatened, like the tip of a black wing passing over the ship. Nile Vanz stamped in, his seamed, iron-jawed visage full of repressed fury.

"Trouble already!" he barked. "I'll grill every half-witted fool in this hulk until I find the guilty one!"

The four looked at each other.

"What's wrong?" Margo asked hurriedly. "Sabotage?"

"You might call it that. Come along."

Puzzling over his meaning, they followed him. Not a word would Vanz speak until they reached the radio room on the top deck. Here he flung the door open and stood aside for them to enter.

Margo had hardly passed through the door when she shrank back with a cry. Over her shoulder Dane saw something that set his lips in a gray line. Blood was spattered on the near wall in scarlet gouts. On the floor, the top of his head shot away, lay the radio operator!

Vanz stalked inside. He yanked a coil from the mass of transmission equipment and let it lie on his upturned palm.

"Five kilobars wave-length," he snapped. "That's not Io's length. It's

Earth's."

"The Hundred—!" Kris gasped.

"Someone's given them the warning! I wonder who!" Vanz said acidly.

As if by signal, the eyes of all turned upon Brooke. The girl started.

"You—oh, you're wrong!" she cried. "Dane, I swear I know no more of this than you! Haven't I been with you almost every minute?"

Uncertainty claimed Dane. The others watched him intently. Doubt lay close to the surface of his troubled eyes. More softly, Brooke pursued:

"Didn't I risk my life to come to you, Dane? Would I have done that if I hadn't really believed in you?"

Dane couldn't meet her imploring eyes. Common-sense told him that Brooke was the only one who would have done it. But a stronger urge in him was to believe her. Finally he looked up at Nile Vanz.

"I'll vouch for her," he said levelly. "For one thing, I don't think a woman of Earth would know how to run an Ionian transmitter. And besides I – well, I just choose to believe her," he ended lamely.

"I'll hold you to that." Vanz growled. "In the meantime, we must all keep our eyes and ears open. Keep quiet about this. Perhaps the murderer will try another coup. Then we'll grab him."

When the others had gone out, Brooke pulled Dane's face down to hers and pressed her lips against his. Into his ear she whispered:

"I knew you'd believe me, Dane!"

Dane fumbled for an answer. His reply might have been easier had he not seen Margo glance back over his shoulder at them. Her eyes dropped instantly, but a darkness had flowed into them, and the darkness was one of hurt. Tight-lipped, he disengaged Brooke's arms. They fell in behind the other pair. And Dane Cabot was wondering when the old spark had died.

Vanz took Kris to the bridge with him to confer on some matter. Brooke went to her room to rest, and Dane entered the smoking room for a cigarette.

It was just ten seconds after he lit the match that tragedy struck.

## CHAPTER IX

### In the Cavern of the Dead

OUT of the violet immensity, silent as marauding wolves, a swarm of tiny ships leaped upon the fleet! Like silver sparrow-hawks, they were, splitting into ten squadrons of a dozen ships each and diving upon the ten gigantic war-craft. Dane shot to his feet as alarm bells clamored all over the ship. Through the window he saw the reason for it.

Around the *Orsis* swarmed a dozen swift pursuit ships. While he watched, a crackling blue ray stabbed from one of the flagship's gun-stations and an Earth-ship exploded into metallic fragments. But eleven angry hornets remained to put their deadly stingers into the clumsy warship.

Dane raced from the smoking room and plowed through milling soldiers to make his way to the bridge. Nile Vanz's booming voice seemed to bulge the walls of the cabin as he approached. Dane entered to find him barking by turns into a dozen microphones. Lights flashed on the switchboard as officers throughout the ship sought to get in touch with him.

Kris was at the controls. The chief gunner, with eight television pictures shimmering before him, stabbed frantically at buttons as the darting American ships crossed his sights.

The warlord shot a blazing glance at Dane.

"Why didn't I guess!" he roared.

"Whoever used the radio told these damned space-wolves when we'd pass this spot! It's Johnny-hold-your-breath now. They're twelve to one and every ship a threat. Take some of these calls, Cabot."

Dane sprang to the job. Some of the requests he couldn't answer, but many of them he took off the perspiring commander's shoulders. His thoughts went often to the lumbering *Valiant*, wallowing helplessly while its swifter enemies dived upon it. His father and Margo's father were in the ship. Dane fervently hoped that the *Valiant* was captained by as capable a man as Nile Vanz.

Suddenly the *Orsis* seemed to stagger. A hollow boom rang through the bridge. The chief gunner whirled from his screens.

"My God, sir! We're hit!"

Vanz' brown granite features showed no emotion. He grabbed a microphone.

"Wark! What's the extent of damage?"

"Bad, Commander!" The answer crackled back. "Outer shell ripped forty feet in Section One, and I think inner shell cracking in forward observation room. . . ."

"Then lock all safety doors of top-deck. If the compression shell gives we'll be gutted!"

"Wait!" Dane shot to his feet. "Princess Margo was going to the observation room the last time I saw her."

The Warlord's eyes winced, but he shook his head doggedly.

"Let's hope she's not there now. We can't risk waiting to find out!"

Kris' fingers clamped on the older man's forearm.

"She'll die in there!" he croaked. "You can't—we've got to get her—"

Vanz slammed Kris back into his seat, bellowing angrily.

"Get on those controls! Are you trying to kill us all?"

White and shaking, Kris took up his job of evading the Earth-craft.

Dane was standing in the doorway when Vanz turned back.

"Give me thirty seconds" he clipped. "If she's in the room, maybe I can get her into the hall before the shell splits."

Vanz shook his head stubbornly. But Dane had already turned to run. The last thing he heard was the commander shouting.

"Dammit all, anyway! Hold that order thirty seconds, Wark!"

DANE bounced the elevator against its spring bumpers on the top deck, onto the landing and his long legs pushed him down the hall. In his ears were the grinding of twisted girders, the hiss of escaping pressure. The observation room door was open and he lurched through. Behind, he heard the crash of a closing safety door.

Among the overturned tables and chairs he at first saw nothing. But a growing hiss drew his gaze to the ceiling, where light shone through a dozen thread-like cracks. Then a slim ankle, protruding past an upset table, sent him hurrying forward.

Margo was just sitting up when he bent down beside her. Her blond hair was disarranged, and a cut was bleeding on her cheek. Her lips barely moved.

"What happened?"

"We've been hit! They've cut off this deck to save the ship. The ceiling's going fast."

Margo's eyes turned to look upward, and just then steel screeched. Across the polished steel shell ran a long crack. Pressure left the room with a screaming wail. For the two crouching there on the floor, it was as though their bodies were suddenly inflated. Their eyes protruded like the eyes of frogs. Their lungs expanded. Arms, legs, and fingers puffed up to twice their normal

size. Blood gushed from Dane's nostrils, and his tongue swelled until it nearly strangled him.

In arms that were elephantine and weak, he scooped up the moaning girl. Staggering across the floor, he bumped into furniture that his swimming vision failed to register. Dane knew that in another ten seconds his eyes would pop out like corks from an overcharged bottle.

The door loomed ahead of him, a weaving black oblong. Dane fell to his knees as they went through. Then he was crawling back, pulling the heavy steel door closed behind him. It thundered into its frame. Dane had only tightened two of the wing-nuts when a reverberating boom shook the deck and the door bulged outward.

The gods were in a tolerant mood, for the two bolts held. Dane got the others tightened and then crawled down and opened the pressure door. For a moment he could only sit back against the wall and feel the growing pressure soothe his horribly distended limbs. His eyes stopped their throbbing, and blood ceased to jet from his nostrils.

Margo was on her knees where he had left her. Her thin cry came feebly to Dane.

"Dane! Dane! where are you?"

Dane stumbled to her side. He went down on his knees beside her.

"Right here," he whispered. "It's all right, now. The door's going to hold."

"I was afraid—that you were dead!" Margo stammered. She seemed trying to hold her emotions by main force, but suddenly the flimsy wall of propriety fell and her arms went up to slide about his neck. "Oh, Dane –I didn't want to live if you were dead!"

Dane's fingers sank into the soft flesh of her shoulders.

"You don't mean that, Margo!" he said sternly. "There's Kris—you love him . . ."

"Oh, I wish I did! But I—I can't! That night on the knoll, I knew I never could love him. I tried not to love you. But, Dane—I do!"

Dane's arms brought the girl against him. Her lips were warm and soft, and Dane's own lips pressed them crushingly. Then at last, breathless, he released her. Tears shone in Margo's eyes.

"What can we do?" she whispered. "There's Kris and Brooke. You don't love her, Dane—I saw you—in the radio room, this morning—"

The Earthman's answer was to kiss her again, a hard, unyielding kiss that only ended when a bell broke the hush. The sound recalled Dane to all the grim reality around them. He held Margo back and helped her to her feet.

"For our own good, Margo—for everyone's good—we've got to forget this," he said miserably. "You and I were born on wrong sides of the universe. No need to make others suffer for our own bad luck. Kris is mad about you, and I think Brooke loves me. Our happiness would have no foundation if it were built on their misery."

Margo ventured a smile that went poorly with the hurt in her eyes.

"I know. But they can't keep us from remembering!"

Dane would not trust himself to be with her any longer. He helped her into the elevator, and when it reached the main deck he hurried off without looking back.

THE clamor in the control room was less when Dane reached it. Nile Vanz shot a squinting look at his bloody shirt and white face.

"Well?" he jerked.

Dane looked past him at Kris. He smiled reassuringly.

"She's all right!" he announced. "What's happened outside?"

"Got them on the run!" Vanz grinned wolfishly. "Look at them!"

Dane stared, and the hard set of his square jaw relaxed.

Reminds me of the old Indian fights!" he chuckled. "With the redskins galloping around the wagon train and getting themselves shot down."

"Got the idea from stories Sam Cabot told me," said the Warlord. "Those pioneers of yours must have known how to fight, too."

Dane looked long and with satisfaction. Vanz had brought his ten-ship fleet into a circular formation, exactly like some beleaguered wagon train ringing-up on the prairies. For a pursuit ship to venture inside that ring brought instant, blazing death. A score of them had tried it and been cut down mercilessly. With disruptor-guns blazing incessantly on the outside of the ring, as well as above and below, the Earthcraft could attack only on the upper and lower quarters. And a warship had but to rock gently to bring her guns to bear on ships trying this.

Of the hundred and twenty savage little pursuits that had come rushing to the kill, thirty remained. Their cannons, pitifully futile now, kept roaring and launching steel-jacketed explosive bombs. In all, only four of these bombs had found targets. One was on the *Orsis,* and of the other three, one alone had destroyed its target. Five thousand men had been lost to the rebels, but no leaders.

At last the attackers drew off. Vanz immediately gave the order to follow. His ships were faster, if more unwieldly. But on a rocket ship's tail, they could keep her in the sights long enough to turn the shining space vessel into a tear-drop of melted steel. Less than an hour after Loren Bayard's vaunted wolves of space attacked, there was not one left to slink back in defeat.

Nile Vanz switched off his microphones, wiped his sweaty palms on a wrinkled handkerchief, and frowned at Kris.

"Resume your former course," he clipped. "Steady as she goes!"

Dane purposely avoided Margo from that time until they raised Eighty-Eight in their fore-ports. He was in the landing party Vanz appointed. The nine Ionian ships found silent resting places within the crater.

A hundred men from each ship emerged on the glass shell, cumbersome in space-suits. Dane led the way to the air-lock. There he was joined by his father. Sam Cabot slapped him on the back, exclaiming something that the helmets muffled. But Dane knew it was his congratulations on the rescue of Princess Margo.

The Cabots headed the column of men that trooped into the caverns. Once again, on the threshold of the barracks, that icy feeling of apprehension crept over Dane. From the white faces about him, he knew that more than one man shared his sensations. Only the older Cabot kept his slight, anticipatory smile.

"A three-quarter century sleep about to end!" he murmured.

He threw the door open—and staggered back. The cry he uttered froze the very heart of Dane.

## CHAPTER X

### The Man from Hell

OVER his shoulder Dane gaped at a scene of blackest horror. The sleeping army still occupied the cavern; but to a soldier, to a nurse, to the last orderly, they had been destroyed.

They lay in heaps, as farmers gather

corn into stacks. And every pile was a black, shriveled mass of burned flesh. Broken glass lay four inches deep on the floor. Not a shield was unbroken. The nurses lay in a pitiful line along the stone wall. Through the heart of each one a bullet had been fired.

"God in heaven!" Samuel Cabot said that and slumped against the wall. Dane tore himself from the sight of carnage and caught his father just in time to keep him from falling. Cabot's flesh was a sweaty green, and he was laboring for breath.

Nile Vanz brushed past Dane.

"Lay him on the floor," he grunted. "Hold his feet higher than his head. Damn those Mu rays!"

When Dane had his father on the floor and was briskly massaging his wrists, the warlord whirled angrily on the crowding soldiers behind him.

"Back!" he roared. "What needs to be done we can do. There's no need for a bunch of gaping hyenas like you! Be at your posts and ready to leave in five minutes."

The old rebel was longer in coming around this time. It was plain to his companions that he had not left Io a day too soon, and that he had a long period of convalescence ahead of him. But the question was whether he could weather the tremendous fight ahead.

Finally he was on his feet again and staring bitterly into the cavern.

"Murderers! Fiends!" he croaked. "Loren Bayard, you'll pay for this with your own life's blood!"

Vanz laid a big hand on his shoulder.

"A bitter pill to swallow, but one we've got to take," he growled. "I'm wondering how they f o u n d the place . . ."

Dane looked sharply at him.

"If you mean Brooke Loring, I haven't so much as mentioned the sleeping army to her since she landed on Io."

"Benchley might have left papers describing the location."

"Brooke said she found them and destroyed them all."

Vanz fingered his stubbled chin.

"Uh-huh," he murmured.

An angry flush rushed to Dane's neck and ears. But Vanz turned away without giving him a chance to argue.

Cabot spoke broodingly again.

"This is a blow we'll be fifty years recovering from. Those men were to be the nucleus of the new America I've dreamed of. The milksops under the dictators—what kind of man-stuff are they to foster a fighting nation!"

"You're being a little hard on them," Dane countered. "They seem weak and vacillating, but in reality I think there's some solid stuff in them. They've taken orders so long that to them initiative is something The Hundred possess and they aren't allowed to mention. When they're under our rule, we'll make them or kill them. Throw them on their own: give 'em farms to cultivate, lathes to run, cities to build—they'll assay high in fighting spirit, Dad! They'll be so damned glad to be men again that in a few years every man will want to run for President!"

"I hope you're right." Cabot shook a dubious head. "At the best, we can count ourselves out a very valuable fighting force. We needed them to keep martial law after the overthrow of the dictators. I don't know how the Ionians will work out."

Vanz took him by the arm and turned him back to the ships.

"My people will try, you can count on that," he smiled. "Let's worry about an army of occupation when we've won our fight!"

THE fleet silently rose from the crater of the dead and sped on to-

ward Earth. Within twenty-four hours the cry went ringing through the *Orsis*.

"Planet on the starboard quarter!"

The news brought sudden tension that was like an electric charge to the flagship. Nile Vanz called Dane, Kris and Margo to the bridge for a television consultation with the rest of his fleet. He called the *Valiant*, and Samuel Cabot's long face appeared in the screen.

"Earth has been sighted!" announced Vanz. "It is time to make our plans. I thought of attacking New York, as the seat of The Hundred. Have you any objections to that?"

"None! I'll leave the strategy entirely to you. But I have one suggestion to make. Strike without warning and strike hard! Slaughter every battalion they throw against us. For only in that way can we keep the dictators from slipping out of our grasp."

"Brutal," Vanz said reluctantly. "But, of course, necessary."

"There's no other way! If they escape New York, they may turn the whole nation into a fighting unit."

Dane suddenly cut in:

"Wait a minute, Vanz—that gas you put me to sleep with in the little cruiser . . . is that difficult to make in quantities?"

Vanz looked at him queerly.

"A very simple derivative of Red Spot concentrate. In fact, our ships have given off tons of it since we left Io! It is the main exhaust gas of the impulsors that run the ships."

"How much of it could we capture in, say, six hours?"

"If we kept both stern and forward impulsors running full tilt, so that we would stand still, I should reckon several tons. Why?"

"Several tons — listen, Vanz — you want a bloodless victory. I think I know how you can get it!"

Vanz grunted: "Just a minute." He fingered some switches. In a moment he was in communication with every ship. Eight more commanders came into the group. The warlord turned back to Dane, a hard glint in his eyes. "Now, then . . .!"

HALF a million miles away, in New York, lights burned in a room high in Government House. Night lay heavily upon the city, but there were ten who did not sleep. For twenty-four hours, Loren Bayard, East Bayard, and eight of The Hundred had listened wearily to the crashing of static from a loudspeaker.

Loren Bayard, wizened little mastermind of cruelty, strutted nervously before the group who sat with elbows planted on a long table. Cigarette smoke clogged the small room. The dictator's eyes were bleary and the skin of their faces was drawn with fatigue. Their white and gold uniforms were soiled, wrinkled. East Bayard stabbed viciously at the table top with a small gold knife.

"Why in hell don't they answer?" he snarled. "Anderson should have called us last night at the latest."

Big blue-jowled Clay Gorman, Commander-in-Chief of the American forces, looked at him from under looming black brows.

"Maybe they got in trouble in the Quicksands," he suggested. "Couldn't get a message through."

Loren Bayard's acid-green eyes snapped derisively upon him.

"You talk like a moron, Gorman! Anderson has charts of the Quicksands that he made himself. He knows that section better than you know your own home. I talked to him two hours before he cleaned up the sleeping army."

"You don't suppose the fool botched the job!" East cracked out. His eyes

goggled sullenly through those thick, pink glasses of his, and his narrow brow corrugated.

"Botch it? How could he? Twelve to one! I didn't expect more than half of them to come back, but they couldn't *all* be destroyed!"

Marcus Baring's thin, brown cheeks sucked in.

"God help us if they get through! With their disruptors they could mop up this city in six hours!"

The loudspeaker quivered with another violent eruption of static, and Loren Bayard jumped nervously.

"By God, I'll have his stripes for this delay when he gets back—!"

Suddenly East Bayard was on his feet, ear cocked to the amplifier.

"Hold it!" he barked. "There's something now—!"

The ten dived for the big speaker. Out of a sea of crackling emerged a thin, reedy sound. The thread of sound strengthened, became a voice.

*"Attention, The Hundred—Attention, New York!"*

Bayard looked sharply at East.

"That's not Anderson's voice . . ."

*"Attention, The Hundred!* This is Samuel Cabot speaking! Your fleet has been destroyed. In two hours we shall attack Newark as a demonstration of what will happen to New York should you resist. You are warned to evacuate the city immediately. No blood will be shed if you follow our orders. Resistance is useless. The complete annihilation of Newark will demonstrate this. We warn you again —*prepare to surrender!*"

THE voice died, and once more static filled the speaker. Loren Bayard was first to speak.

"He failed us!" he croaked. "And now—the devils—are on us!"

East Bayard snarled an oath.

"They'll have to kill ten million men before they take over!" he snapped. "We'll warn Newark. Evacuate the city. Bring all troops to New York to prepare for the attack that will follow."

"NO!" Loren screeched. "That's what they want us to do. Mass all our strength in New York and then attack it and wipe men out by the million! What are we against them and their weapons? Newark is only a blind. It's the Leaders they want! I say, evacuate for the mainland!"

Baring, Mapes, Clay Gorman and the rest stared from one to the other of the Leaders, bewilderedly. East towered over his father angrily.

"You're not figuring on their effeminate battle ideas!" he challenged.

"I tell you, they won't kill a man if they aren't driven to it. Cabot was speaking the truth. We'll turn New York into a powder keg. If they try to touch us—" He swung upon Gorman. "Well, what are you waiting for? Call in your troops while we've got time."

Loren Bayard's skinny form sprang before the door as Gorman saluted and turned to leave. His voice was like the brittle snapping of glass threads.

"Get back! While I'm Leader of Leaders, you'll all take orders from me. East, I gave you credit for more intelligence. You've let them draw you into the simplest military trap that was ever invented. When we get out of this mess, I'll see that you find a station worthy of your merits."

East Bayard's hard eyes narrowed.

"You think so? I've got other ideas. There's just one job for me, and it's time I took over. You've grown senile and foolish. You aren't fit to run this nation in war-times."

Loren Bayard suddenly looked hard at him. Then his green eyes wandered to the set faces of the other Leaders. His thin lips became powdery white.

"Treason!" he panted. "I'll have you killed for this, East. Baring, put my son under arrest!"

Marcus Baring started to move forward, and then he stopped and looked from the little old dictator to the tall, stalwart younger man. He rocked back, his black eyes thoughtful.

"I'm not so sure he isn't right," he announced slowly. "What he says makes sense to me."

Bayard looked stunned. Then he spat.

"You'll fry in hell for that, Baring! Gorman, arrest them both!"

It was then that the man who had been the greatest power Earth had ever known realized his power had rotted in his hands. For Clay Gorman, Commander-in-Chief of the United American forces, shook his head and stood doggedly. Loren Bayard was alone, caught in the teeth of the trap he himself had fashioned.

East drew his gun deliberately and cocked it, grinning tightly. Loren Bayard cringed against the door.

"Don't—don't do it!" he croaked. "I'll resign. Take over The Hundred. Run the country any way—"

"Leaders don't resign," said East harshly. "They're ousted. I'm ousting you right now!" His voice grew loud, and with each syllable the finger on the trigger tightened.

The old man's cry was drowned in the crash of thunder that filled the room. His arms locked spasmodically over his stomach, where East's bullet had entered his body. Groaning, he went to his knees. His pain-filled eyes tipped up to the coldly watching Leaders, pleading with them.

East's big revolver barked five times more, and Loren Bayard jerked at each shot. The new dictator of America watched him coldly until he stopped squirming. He turned to Gorman.

"My orders stand," he clipped. "Rush all forces within two hours' distance to the city. Assemble all fighting craft above the island. When they attack—we'll be ready!"

## CHAPTER XI

### Worlds at War!

AT FOUR o'clock that morning, out of the lead gray darkness of the west, a faint whistling was heard, as of wind sighing around the rivets of swift fighting craft. Instantly, squadron upon squadron of fleet warships rose from the metropolis, deadly little dive bombers and fast pursuit ships bristling with powerful guns.

On the bridge of the *Orsis,* beside Nile Vanz, Dane Cabot heard the tinkling of warning bells that announced their coming. Kris was again at the controls. The Chief Gunner was ready at his robot-triggers and television screens. Vanz spoke hurriedly, betraying only a slight nervousness now that the moment of moments was here.

"What is our position?"

Dane was peering into a big, circular screen fixed on the top of a table. Below the ship were dense clouds and black pea-soup fogs. But in the infra-red screen he saw clearly the details of the city below.

"Directly above the island," he said crisply. "I see planes rising—clouds of them! Good Lord, the sky is black! I can hardly see the city for ships, now!"

He fought down the momentary panic that surged up within him. Tried to remember that there was a strong chance of victory if they followed their plans. But the recurrent thought that one tiny mistake would mean defeat kept hammering at him.

Vanz had been in communication

with the other eight ships for the last hour. Now he began to bark orders:

"Take positions at the twenty-thousand-foot level! Continue to drop at the rate of one hundred feet per second, levelling off at two thousand feet."

The Ionian battle craft swung into the circular formation that had been so successful before. They were in a tight circle, dropping swiftly through the clouds, when the first roaring Earth-ships attacked them. Instantly, the *Orsis* was rocking and lurching as bombs exploded with a hundred feet of her already damaged shell.

East Bayard's host came at them like a swarm of black hornets. They choked the sky. They were everywhere. There was not a spot the raking disruptor beams touched that was not filled with a plane. Through the flagship's insulated shell, their roaring came as a steady blast of thunder. It was unnerving, terrifying.

Dane watched hundreds of ships go down as mosquitoes might drop when a blow-torch flame cuts through clouds of them. But for every combat-craft that crashed into the crowded city streets, another zoomed in from nowhere.

Dane groaned as he saw the *Jovian,* one of their own ships, lurch violently and slide Earthward. Immediately a hundred dive-bombers were after her. Dane closed his eyes tightly as the warship burst into flame.

But there was no time for regrets. The circle was drawn tighter to close the gap. Gunners stabbed more viciously at their triggers. If they lost eight ships in defeating The Hundred, there would still be one to take over.

At ten thousand feet, Dane turned hurriedly to Vanz.

"There seems to be no wind. I think we can start now. Will you notify the other ships?"

Vanz nodded. Dane rushed from the room as he began to call the other commanders. He lurched from one wall of the corridor to the other with the incessant plunging of the ship. Reaching the elevator, he dropped swiftly to the bilge deck, bottom-most level. Here, in stuffy, hot quarters, he groped to the air lock through which waste was shot into space. A dozen big tanks of compressed gas lay beside it in a rack. Dane laboriously deposited three of them in the tube. Then he slammed the lid down and yanked the release lever.

The tanks hurled toward the city. A hundred feet from the ship they passed through a disruptor-beam and exploded. Sparkling, amber gas blossomed in a great, woolly mass. From other ships, tanks began to drop and explode. Dane raised three more tanks and dropped them into the disposal-tube. Again he yanked at the release lever.

The first result came when several of the combat ships wavered, slipped away, and spiralled earthward. Drawing their air supply through filters in the shells of their ships, the pilots had breathed deeply of the Ionian gas. It was the same gas that had put Dane Cabot to sleep on his voyage to Io. And it was sinking in thick, sweetish layers all over New York City!

LOREN BAYARD had been right. His strategy had matched that of the attackers. Had East listened to him, The Hundred would have been safe somewhere on the mainland now. But they were not. They were in Government House, directing the repulse of the invaders.

With the last of his tanks cast overboard, Dane stood at a port looking down. Elation gleamed in his eyes. Yet, tempering that gladness, was deep regret.

Thousands of fine, trained fighters were dying down there. The flames from their crashing ships sprinkled the still dark city.

Dane went back to the bridge. The attacking craft had been thinned out until pitifully few remained to attack them. But Nile Vanz kept his fleet in battle formation until the last of them were downed by gun or gas.

Abruptly, they realized there were no more combat planes in the sky. The Ionian ships broke formation and dropped slowly into the heart of the metropolis. By the glare of their landing lights, they could see hordes of men, women, and children lying motionless in the streets and parks. Everywhere there were wrecked planes and automobiles. Fires dotted the city.

Margo stood beside Dane as they came to rest in Central Park. He heard her quick, excited breathing. For the first time she was seeing the world Samuel Cabot had been telling her about for years. Dane would have liked to share with her the joy that was evidenced in her face, but for Margo there was Kris; and for Dane there was Brooke.

Brooke had said nothing as the ships neared the city. But now her eyes shone with excitment.

"Dane, it's glorious! The Hundred are defeated. It's you Margo's people have to thank—"

Dane's glance snapped from the port.

"It's Vanz, and my father, and Kris, and a hundred other courageous men," he retorted. "And there's nothing so glorious about the death of thousands of young men."

But he was conscious, as he spoke, that his heart dictated most of the speech. True, the victory had its morbid side. But it meant the culmination of a fight that had gone on through almost a century. The others looked at him queerly, and only Margo knew why his eyes were dark and brooding.

Soldiers began streaming from the ships as soon as word was given that the gas was sufficiently dissipated to be harmless. They walked heavily, unaccustomed to the powerful drag of Earth's gravity. Dane quit the bridge with the rest and they stood silent for a while on the soft greensward of the park. Across the gray dawn sky were splashed crimson washes of color from the fires that leaped through the city unchecked. From other ships hurried Samuel Cabot, Tolek Serj, and the various commanders. Typically practical, scorning the praise the others sought to bestow on him, Cabot was all business.

"We won't win the city by standing here," he told them. "We've got our work cut out for us. And right now these fires must be stopped! The whole city will be in flames in a few hours. Organize a hundred squads of ten men each, Vanz. The fire crews must be awakened and put on the job."

"But can we bring them to, this soon?" Dane queried. "The gas kept me under for four days!"

"That was in the confining walls of the ship. Here, with a wind already blowing, the victim's lungs will be cleared soon. That means they'll be coming around in an hour or so."

Dane started.

"Good Lord! We've got to find Bayard and The Hundred, then. If we lose them, there may be guerrilla warfare with their loyalist bands for years."

Samuel Cabot's eyes lifted to the deep skyscrapers.

"That's the one thing we can't let happen." But the hopelessness of finding the men they sought in that wilderness of man-made granite crags and arroyos mirrored itself in his eyes. "From now on, Dane, you'll take charge. You know this city and ways of the Leaders

better than anyone else. Perhaps you begin to see, now, why it was important that you remained on Earth."

Dane frowned.

"We'll start by searching the Government House," he decided. "They probably ran their defense from there. I don't think they had time to escape after we gassed the city. If we don't find them, we'll block all roads and and subways and ground all ships—and then pray."

WITH Vanz, Cabot, Tolek Serj, and a score of others, Dane led off into a wide avenue lined with the vast honeycombs of bureaucracy; Telepathy House, Physics House, Chemistry House, and any number of others. Several of these buildings were in flames; others had spilled their polished marble and granite bricks into the street in heaps of wreckage. At the far end of the street they hurried up the broad steps of Government House.

In the street before it, and all the way into the magnificent central room, they waded through battalions of sleeping guards. Lying across their guns, snoring softly, The Hundred's private army raised not a finger to stop them. Dane knew the lay of the various floors from previous visits to Government House. He hurried to the elevators.

High above the paralyzed city, they ran down the hall to the private chambers. With his gun jutting low before him, Dane rushed into the long room. An exclamation of dismay broke from his lips.

"We've lost them!" he groaned. "And yet look—! They were here just a while ago. Their television screens are still trained on the sky and the telephones are off the stands. They must have seen the last of the battle!"

Tolek Serj, chin whiskers bristling, pointed at the floor, where the red glow from a burning Biology Station illuminated it fitfully.

"Something's been dragged from the table to that door!" he cried. "One of them must have escaped the gas and dragged the others out." In the thin veneer of dust on the floor, wide swaths had been brushed in several places.

Dane's eyes widened. His glance snapped to Nile Vanz's face. The shadow-man's translucent features seemed to shine with angry, ominous light. He was thinking the same thing as Dane.

Dane crossed the floor swiftly, to wrench open the opposite door. It gave onto a small elevator. But only the gaping shaft met his eyes. He pivoted, fighting a nervous urge to shout.

"They must be in the streets now! It we work fast —"

## CHAPTER XII

### Dying World

THEY crowded through the door and raced for the elevator. But when they pushed "Down" nothing happened. Dane tried the other unavailingly. Desperately, they went down the line of elevators and found them all lifeless. Finally, Dane stood back, his face burning with the wrath that boiled him.

"A fine bunch of sleuths!" he snarled. "Ninety-six floors from the city and nothing but stairs to get us there. Our gas-proof friend has pulled the master switch. We may as well start walking. If we hurry, we'll be down in less than an hour."

Winded and nearly exhausted, they emerged on the street in a half hour, but by that time it was useless to search for the missing men. The troops lying prone in the street were beginning to stir. Ionian soldiers hastened to dis-

arm them.

Dane frowned as he stood watching, conscious that the others were waiting for him to decide what to do next. They, even his father, were as foreign to this city as he was to Io. If order came out of the chaos about them, he must be the one to stimulate it.

"We could use that sleeping army now," he said softly. "We've got the biggest clean-up job in history ahead of us. Every soldier and policeman in this city must be disarmed, and there are probably a million of them. There have been rumors that The Hundred have established scores of 'sleeping armies' about the country, taking a tip from us. The Hundred, themselves, as many as we can find, must be imprisoned. I want the Vedette rolls found and every secret policeman in New York City put under guard. When all that's done, we will broadcast to the people and the whole world what we intend to do. I don't expect trouble from the people themselves, but if they're stirred up they may band against us. They're putty in a good propagandist's hands."

"We'll start our own propaganda machine tomorrow," his father broke in. "Eevery man and woman in the nation will be hanging on his radio trying to learn what has happened. We'll have plenty to tell them!"

NEW YORK CITY awoke, a frightened and bewildered chunk of humanity. The millions knew they were a conquered nation—there were squads of strange, lanky soldiers in every street—but the most pessimistic could see that the invaders weren't the brutal militarists their own Vedette men had been. They were everywhere, helping with the injured and sick, bringing supplies to the homeless. They talked a strange gibberish, but their helpfulness was universal.

The morning of the following day, a strange fleet of ships darkened the sun as it sought a landing across the river. The terrified populace ran for cover from the expected aerial bombardment. Their surprise was boundless when the ships landed peacefully and hordes of men, women and children trooped out, to begin the orderly construction of tent cities.

In Government House, the Ionian staff leaders breathed a collective sigh of relief. The first convoy was in without a ship lost! Now there was the return trip to be made, a trip that might find tragedy at its culmination.

Of The Hundred, seventy-five were found and jailed. One of these was Marcus Baring. He was found in the basement, where apparently he had been abandoned by the person or persons who kidnaped the others. But Baring could tell them nothing of the escape. The Vedette chief was useful, however, after some of his own rigorous grilling methods were put to him. He was persuaded to produce secret police rolls and aid in the capture of most of the four thousand agents in the city.

On the morning of the second day after New York was taken, Samuel Cabot made his announcement to the world from which he had been driven so long before. Dane's eyes were on his glowing features as he spoke into the microphone.

"You have been told by your Leaders that when we came, bloodshed, violence and slavery would ride the skies with us," he reminded his vast audience. "By this time you must know that we come in peace. The autocracy has been overthrown; but it is not slavery we offer you. As soon as it is practical, you will be restored the right of electing your own ruling bodies.

"You have been told a race of savages

was going to descend on you, bringing rape and murder with them. Have you found the Ionian strangers like that? No! You are living side by side with them now, and they are no different from you except that they expect less. Their world is even now crumbling, and it meant death for them to stay longer. On Io, their friends and relatives may be dying at this moment.

"Men and women of the new America, we plead with you not to fight our efforts to bring you the freedom you last nearly a century ago!" Samuel Cabot's voice shook as he said that. "There will be attempts to reinstate The Hundred. Only you can make certain that these attempts fail. Somewhere, at this moment, East Bayard is listening to my voice and planning how he can still that voice forever. Unless you resolve not to lose the liberty we are putting in your hands, Bayard will be successful. Americans, if liberty means that little to you, I shall welcome that death, wherever and however it comes!"

IT WAS a strongly moved little group in the broadcasting room who heard the last of his plea. Vanz's faded blue eyes were moist as he gripped Cabot's hand.

"Your words would have moved men of stone!" he gruffed. "I only wish we could stay long enough to watch the results. But we are leaving this hour."

Cabot nodded darkly.

"It's been a week now, since we left Good Hope Valley. What happens here is of lesser importance at the moment than what happens on Io. But you will leave someone to help?"

Tolek Serj puffed out his medal-freighted chest.

"I shall be at your service. I fancy I can hold up my end of a hard job."

All but Kris smiled. Kris was looking soberly at Margo. Dane, watching his face, knew what was coming, and his stomach turned to ice.

"Remember your promise when we left, Margo?" the Ionian queried. "That we'd be married when we reached Earth safely? I'm holding you to your word. We'll make it a double wedding—you and I, and Dane and Brooke!"

Excitment followed his suggestion. But there were two of the quartet he named who could not muster the ghost of a smile. The pupils of Margo's gray eyes were large and black as her gaze flew to Dane. Then Dane was turning as Brooke clasped his hand and squeezed it.

Margo colored, with the intent attention of the room focused on her. Old Tolek Serj was grinning broadly, and Kris' eager glance studied her lips. Her voice, when it came, was strangely choked.

"No—no, Kris! That wasn't my promise!" faltered the girl. "I said—when all of the people were settled here—we'd be married. I couldn't do it now, not knowing what is happening to the hundreds of thousands we left behind . . ."

Serj started to expostulate. But it was Kris, no longer smiling, who stopped him with a lifted hand.

"She's right," he said curtly. "Those were the words of the promise, if not the spirit of it!" He gave Dane a slow stare, laden with irony. "Surely you two won't delay your own wedding because of us?" he asked.

It was Dane's turn to snatch at elusive excuses.

"I—I'm afraid I feel about like Margo," he stammered. "I'll be coming along, of course, and—things are so up in the air, it doesn't seem—right, somehow—"

Brooke Loring's smile was the stab of a thin blade.

"No, it doesn't, does it?" she agreed, sweetly. "And I'm sure you'll do a better job if I'm not along at all!" She was hurrying from the room before Dane could open his mouth.

Awkwardness took possession of the group. Everyone began to find business elsewhere, and soon there remained only Samuel Cabot and the little party who would return with the convoys.

Vanz tried to pass it off by joking with Cabot as they shook hands in farewell. But his joke found a dismal silence. A moment later, Dane and the others said good-bye to the elderly leader and followed Vanz from the room.

BROOKE was on the outskirts of Central Park an hour later when the *Valiant* shot from the ground, stirring up miniature whirlwinds among the leaves and fine dust of the paths. Low, black thunderheads engulfed the ship, billowing in behind it as swiftly as it passed. A moment later, the convoy fleet across the river began to depart.

As the last one left, the girl's slim figure slipped into a small car at the curb and she sped into the jumble of New York's awakening traffic. Leaving the center of town, she came into the quieter, dingy sections of the East Side. In one block, most of the buildings had been ravaged by fire. Here she stopped and began to walk.

Repair crews had not yet penetrated this far. A gaunt old apartment house had lost half its height when a pursuit ship crashed into it with a charge of bombs. Brooke unobtrusively turned into a side entrance and descended to the basement. In a dark room where rats rustled in scattered papers and the sun was known only by its shadows, she went to a low door and knocked softly.

Immediately the door opened a sliver and a bearded, hollow-cheeked face moved into the aperture, the cold blue ring of a pistol held a foot beneath it. East Bayard's voice croaked:

"Brooke! Thank God! We thought they'd got suspicious of you—"

Brooke's features shone with eagerness. She slid into the candle-lit room, and for a moment East clasped her in his strong arms. Then she exclaimed:

"They don't suspect anything yet, the fools! All but Sam Cabot and Tolek Serj have just left for Io with the convoy. You could get Cabot and Serj right now—they'll be leaving the building before long.

Defeat had stamped him with its haggard badge, but the fervor of hatred was like a scalding fluid in his body. Bayard shook his head impatiently.

"It's a short chance we wouldn't be seen. We're going after the others."

"Using what for a ship?" scoffed Clay Gorman. "They'll watch those battle-ships like hawks."

The four other men who sat on boxes about the cellar watched each man's face as he spoke. Desperate men they were, eager for any change to escape.

"Let them have their ships," Bayard snapped. "For this job, I'll take a rocket ship of our own make."

"But, East—!" Brooke regarded him incredulously. "The battle over the city showed the superiority of the Red Spot concentrate as a weapon and motive power over our products."

"In this atmosphere, maybe," Bayard said. He patted some wrinkled, dirty papers in his shirt pocket. "Those notes of Benchley's have kept me from going crazy these last three days. They've done more than that, too. Given us a valuable weapon. Benchley was something of a physicist. Enough of one to learn more about the concentrate than even the Ionians

know. I'm gambling on his being right."

"This is no time for a gamble!" barked Gorman. "We'll take the surest way."

East's bearded jaws showed the working of his muscles.

"Hasn't this whole thing been a gamble — a seventy-five year gamble? We've won so far because the Leaders held all the cards. We've got only one card, now, and that's Benchley's notes. But I'm willing to stake everything that he was right!"

He turned to Brooke.

"We won't forget our debt to you, Brooke—dragging us into the elevator and hauling the six of us to safety. Here's the last request we'll ask of you. Come back for us at midnight. Have food for a couple of weeks. We're going to break out one of the ships hidden back in the hills."

"What are you going to do, East? What's your plan?"

East let a smile turn up the corners of his hard lips.

"Let's cross that bridge when we come to it, shall we?" he said.

## CHAPTER XIII

### Cataclysm

IT was not a pleasant one, that return voyage of the *Valiant*. Nile Vanz was sour with worrying over the fate of his countrymen; Margo worried about that and Kris' jealousy; and Dane fumed under Kris' unjustifiably sarcastic attitude.

Dane held mostly to his room. He tried to keep his mind off Margo by thinking of the situation on Earth. There was plenty to disturb the most placid mind.

Then, after four tedious days, came a more immediate worry. Jupiter was in the sky before them, floating serenely through space! Io came rocketing above the horizon, and with the sight of it, all was forgotten but the fate of the little colony they were racing to save.

Crowding the ports, they stared ahead as Kris put the ship into a long, sloping drop. Behind the *Valiant* wallowed the hundred-odd huge transports, empty of all save a few dozen sailors. Io was no more than a barren chunk of rock. Of landmarks, there were almost none.

Crags and scarps had been levelled with the surrounding plains, plains composed of giant black rocks that looked as if they had been smashed in a sack like ice cream for a freezer, and then shaken far and wide. Here and there were seen deep rifts across the terrain. In a few weeks the planet would be spliting through and through. Then Jupiter would fling off the fragments and number one less moon among her satellites.

Across the night-side of the planet the fleet swept, lights questing downward, sweeping, sweeping over the wastelands. The watchers' eyes ached with searching. Back and forth the *Valiant* moved, scouring the dead world. But no trace of life was raised. There came a time when Kris grunted impatiently and turned the ship toward the other side of the globe.

At Margo's side, Dane could feel the trembling she tried to conceal. Unconsciously, his hand brushed hers, and the girl's fingers swiftly seized it. She leaned against him as if deathly weary, her golden hair soft against his cheek.

"Do you think we'll ever find them?" she whispered.

"Of course we will! We've hardly started looking."

Nile Vanz' rumbling tones broke through the cabin.

"Bear off to port a point. Something shining over there."

The battleship pivoted on an invisible axis and moved westward. Rocky humps, jumbled canyon, passed under the anxious eyes of the searchers. Nile Vanz stood hunched before the glass, binoculars to his eyes. A murmured oath came from his lips.

"Dammit! Just a chunk of volcanic glass. . . . As you were, Kris—"

Margo's fingers tensed on Dane's. "Wait! Dane—Kris—*a flare!*"

FROM the far rim of the planet it was arching, like a green-and-white meteor. Each man's eyes had picked it up before it gained its zenith and exploded into a dozen smaller flares. While Kris was still staring at it, the warlord's hands came down on the controls, yanking back the accelerator. The *Valiant* hurled itself forward with a surge of power that had every passenger scrambling for support.

In five minutes they were sinking swiftly upon the city, shadowy in the dim light of Io's brief dusk. The changes a week and a half had wrought upon it were far-reaching. The entire eastern part of the city was buried. The tall mountains on that side had fallen, and the broken rubble of the plains was sweeping in like a crushing flood. But still the Intensifier stood high above the colony, and the densely-populated west side was almost untouched.

Crowds milled beneath the fleet as the ships glided into the square. Darkness came before they touched ground. Police thrust back the mob. They opened up an aisle with brandished night-sticks. The returning crews wasted no time in greetings as they jumped to the ground, for the bitterly cold air bit savagely at their exposed hands and faces. In single file, they hurried into the nearest building, a lofty dormitory for Io's homeless.

Margo had only one thought when they were inside. She turned to the swarthy, excited official who had been in charge during their absence.

"How many, Luji? How many have died?"

"Only a few hundred, Princess," he told her. "But there have been terrible rumblings and shocks for twenty hours. I'm afraid the city won't last another day."

Margo took a deep breath of relief.

"Start loading them immediately," she told Luji. "Each ship will leave as soon as it is ready."

Luji bowed hurriedly and ran out. Margo watched him go. Her hand passed wearily across her forehead. Dane could barely hear her whispered words.

"I think—I'll lie down—for a while —"

In the next moment he was darting forward to catch her as she slumped. He and Kris reached the girl at the same moment. They laid her on a couch. Dane bent over and heard the soft, regular breathing. All the strain had left her features, and her lips were slightly parted like those of a sleeping child.

"She's all right," he told the worried Ionian. "Better off than she's been in weeks. Let's carry her into the ship so we won't have to wake her before we leave. She'll probably sleep for twenty-four hours solid."

They found heavy night clothing and threw several blankets over the girl. Picking up the couch, they carried her into the *Valiant*. After that, Kris grunted:

"I'm going up to the Intensifier. If somebody doesn't stir the boys up on these last loads of concentrate there'll be a lot we have to leave behind. Care

to go along?"

A thin voice of warning whispered in Dane's ear. Something about Kris' manner did not quite ring true. Nevertheless, he found himself shrugging:

"Sure, if I can help."

KRIS left the ship, with Dane close behind him. Trudging up the narrow cobbled streets, they had to stand aside many times for crowds of men and women pouring from alleys with their belongings. The Rulers' House was deserted when they passed it; long cracks in the masonry told why.

The Great Red Spot, unusually bright tonight, was like an ugly crimson gash in the sky above the hill-top when they gained it. Momentarily, Dane was gripped by the intensity of its light. It sparkled on the bronze machinery about them, cast a reddish fog over the city. The cancer-like crater appeared almost to have a sort of life of its own. It was not for almost a minute that Dane noticed the brooding silence in the plant. Quickly he looked at Kris.

"I thought you said we'd help," he frowned. "They're all gone, and the vats are empty."

The shadow-man smiled a little as he drew his gun.

"Sorry I had to mislead you. But it was the only way to get you alone without arousing your suspicions."

The sinews of Dane's arms and legs began to bunch, and his glance flicked to the gun.

"What's the idea?" he demanded.

"Let's be honest with each other," Kris suggested quietly. "You and I both love Margo. But we can't both have her. So one of us is going to stay behind when the ships leave."

"You damned, jealous fool!" Dane raged. "Margo's yours. I've never tried to take her from you and I wouldn't if she offered me her love. Put that gun away. Killing me is the one thing that would alienate her from you forever."

"I want more than marriage with Margo," Kris clipped. "I want her love. While you're alive, I could never be sure of it. Nor could you be sure of it if I were alive. For the good of all of us, either you or I is going to die here."

The light that burned in the Ionian's face was madness, and Dane knew better than to tackle him unarmed. Temporizing, he grunted:

"What's your proposition?"

Kris held the gun in his palm.

"This is a fifteen shot pistol, of an ordinary Earth-make. I have one charge in it. We will spin the cylinder, then toss a coin for the first shot. The man who wins, fires first at the other. If that chamber is empty, the gun passes to the other man. And so on." As an afterthought, he patted his gold-mail shirt. "I have another pistol in here. If you try to club me with the gun when it is your turn to shoot I'll defend myself. Now let's start. Do you have a coin?"

Dane found a quarter.

"Tails!" he muttered. He tossed it, his eyes clinging to the shadow-man's face. How to get out of this tragic situation seemed as difficult at present, as trisecting a right triangle with a pair of dividers. Kris grunted with satisfaction.

"I WIN! Ready, Cabot?"

The gun was close to his stomach, and there was not the shadow of a chance to stop Kris now. Sweat came out in fine beads over his face. His stomach sucked in. Dane had to lick his lips before he could reply.

"Go ahead, if you've got to!"

Kris pulled the trigger. The pistol emitted a sharp click. The Ionian laughed, tossed the gun over, and handed it butt foremost to Dane.

"Good luck, Cabot!" he smiled.

With the gun firmly gripped, Dane suddenly began to plead.

"Kris, for God's sake—!"

Kris' hand moved toward his other gun.

"Fire—before I do!"

Dane closed his eyes and pulled the trigger. His body pushed forward a trifle, braced against the expected recoil of the powerful revolver. And that empty click sounded again.

Kris took the gun roughly from his fingers. Without a second's pause, he pulled the trigger. He had flipped it about and handed it back to Dane before the Earthman realized what had happened. Once more it was his turn, and he steadied his nerves for the ordeal.

The curved sliver of metal yielded to the pressure of his finger. In the next moment an explosion rocked the ground. The noise was a thunder-clap in Dane's ears. Dane sobbed aloud, and his eyes opened.

But Kris was standing before him, unharmed!"

The Ionian was trembling. His eyes were like two black holes in his pale face. Slowly he twisted to look down the hill, to cry out as though a knife had been stabbed in his back. Dane echoed his cry with a groan.

"Bombs! Good Lord, Kris, they've done it! Bayard's attacking!"

## CHAPTER XIV

### The Red Doom

TEARS were streaming down the Ionian's face.

"I tempted the gods too far!" he said. "Last time, on this very hill, my jealousy brought what we though was an attack. This time it's happened!"

Below them, a red column of shooting flames showed where the first bomb had dropped. Buildings were tumbling for several hundred feet about the spot. Overhead there was the staccato booming of rockets. While Dane searched for the ship, another bomb landed close to the knoll. The shock hurled both men to the ground.

Kris yelled a warning and began tugging at Dane's arm.

"The Intensifier!" he cried. "It's coming down!"

Dane half ran, half crawled, to the edge of the terrace. Stone columns crumbled behind him, and a second later the ponderous bronze bowl crashed in upon the plant. Before the rolling echoes lost themselves in the sky, he was on his feet and running.

"Come on, Kris! They'll need us in the ship."

"If we can make it," the shadow-man grunted.

Into the city they plunged, fighting crowds of panic-stricken emigrants. Dane still held the gun. Time after time he had to chop with it to batter his way through an impenetrable mob. They climbed through heaps of broken masonry where bodies lay buried and the injured shrieked for help. Screaming women implored their help as they dragged dead or dying husbands and children toward the square. Flames raked across the housetops.

And everywhere there was the thunder of crashing buildings, the roar of bombs. A feeling of horrible unreality fastened on Dane. He hardly felt the smash of bodies against his own, the hot blood that poured from cuts on his face and arms.

Then, suddenly, the teeming square was before them. Clawing, crawling, fighting, clubbing, they made their way to the battleship. The doors were closed when they reached it, but Dane pounded on one of the ports until Nile Vanz

saw him and came running to let them in.

A dozen of the transports had already taken off half-loaded. One of them had come crashing back with a shot through it. Unarmed, the convoys were helpless against the attackers.

The *Valiant* carried only a handful of men. Dane prayed that Margo had left the ship, but as the take-off gravity riveted them to the floor, he saw her in the doorway of the bridge.

From the first, the men in the warship knew there was something amiss. Instead of a fleet, they discovered only one Earth-craft in the sky, and it was in full retreat. Thankful that the bombing was at least temporarily over, Dane was yet mystified by the lay of things.

The attacking ship was small. It dodged, spiralled, sprinted, to keep out of the path of the *Valiant's* guns. And every minute the two ships were drawing closer to Jupiter. The sky-giant's gravity seized them like the tentacles of an octopus. They were hurtling into the Red Spot, and still the Earth-ship fled on.

"There are gold uniforms in the quartermaster's room," Vanz shouted. "Everyone who isn't wearing one, get into a suit right now. "We're coming into the danger zone."

Margo left to find a uniform, so that only Dane, Kris, and the Warlord were on the bridge. Vanz motioned Dane to the Chief Gunner's post.

"We're closing the gap," he told him. "Be ready with that bow cannon."

Like a huge, red Grand Canyon, a thousand miles long and hundreds wide, the Red Spot shot its ragged walls up around them. It was like diving headfirst into hell. What looked like flames, but was actually some form of radiation, shimmered on the pitted surface of the walls. The Earth-ship was roaring along one wall, dodging in and out of escarpments and massive outcroppings. Kris whistled.

"Look at those madmen!" he jerked. "If they brush one of the rocks, they'll have such an explosion as we've never seen. That's nothing but pure concentrate!"

Now the ship was pulling out into the void, sinking deeper into the bottomless hole. Vanz grunted: "Line her and give her all you've got!"

Dane saw the stern of the ship weave into the middle of his sights. He pressed the firing button. Nothing happened, except that their quarry pivoted and started back at them.

"Fire that gun!" Nile Vanz shouted. "Didn't you hear me,"

Dane's reply was a rough whisper.

"I heard you. But—the guns are dead!"

IT CAME to Kris first, the thing that had happened.

"The concentrate, Vanz!" he jerked, "It—it won't work in the presence of all the concentrate around us. You drop an iron bolt in between two powerful magnets, and it will hang there. That's what's happening here. The very air is charged with resistance."

"That can't be," Dane objected. "Why would the ship's motive power continue if the guns are dead? Aren't they practically the same thing?"

"No. The ship uses the concentrate more as a catalyst. The other elements in the mixture keep us going."

The discussion ended abruptly, as a shell exploded within feet of them and sent them wallowing toward the wall. Kris sent the ship straight up in a climb that would take them out of range of the attackers.

But the little pursuit was faster. It was curving around ahead of them in a matter of seconds. Kris was forced to dodge and weave to keep out of the

other's sights. The pursuit came roaring down upon them, driving them deeper into the hole. Within the *Valiant* all was silence. Margo had come back, dressed in an over-large uniform, and she got the story from Dane in monosyllables.

Dane was thinking; black, ugly thoughts that would not be suppressed. Here in the Great Red Spot, a battle between two ships was deciding all that he and his father and grandfather had fought for. New York was still in the hands of the rebels, but how long would it remain that way if Bayard and his cohorts returned to gather up their lost forces? Not long.

Kris broke into his thoughts by exclaiming:

"We've still got the little one-gun auxiliary ship in the hold. Take the controls, Vanz. I've got a notion I can give them something to think about!"

"What use?" Vanz argued, taking over the controls the other had deserted. "The gun in the auxiliary is no better than ours."

"I wasn't thinking of guns," Kris said cryptically.

Dane seized his arm as he started from the room.

"Stay here with Margo," he said gruffly. "That's a job for me."

"I said I'm taking her out!" Kris flared. "Get back to the guns."

Dane roughly thrust him aside.

"Do you have to have a gun stuck in your face to listen to reason?" he bit out. "This is my job. Your job is with Margo and the people."

"Then we'll both go," Kris countered. And nothing Dane could say or do would prevent him from following him to the hold.

THE auxiliary was a tiny ship that would just hold two men. The pair got it on the runway, set the automatic air-lock that jetted the ship from the *Valiant's* belly, and crawled inside. Dane made his way to the pilot's seat. When everything was set, he signaled Kris. The Ionian yanked a cable and the blocks fell off the runway. Then he slammed the door, bolted it, and they plunged into the tube.

In that tiny craft, it was like falling overboard to leave the mother ship. The shell was half glass, and Dane could see clearly from every angle. The first thing he saw was the Earth-ship zooming up at the *Valiant*. He flung the auxiliary straight into her nose, then ducked at the last minute, so close that he could see East Bayard at the controls of the ship, and at his side—Brooke. She was laughing—laughing, as she had always laughed at Dane.

Now he was whirling the craft about and tearing after the attacker. A gun belched flame among the other's stern rockets. A bomb whistled by them so close that its passing jerked at the ship. Dane saw the folly of attacking from that angle again.

Three times in the next minute he saved the *Valiant* by darting in and forcing Bayard to yield. The Leader's shots were coming at the auxiliary more often than at the *Valiant*, now. Realizing that, Dane said hurriedly to Kris:

"We've got his goat! Maybe we can draw him away from the ship for a minute—"

"Not long enough for them to get away," the Ionian grunted.

Dane knew it was probably true. He knew something else, too: That even if they decided to bring Bayard down by crashing head-on into him, the job wouldn't be so easy. The pursuit was fast and maneuverable, and Bayard could dodge as easily as they.

As if Kris had been reading his thoughts, he said:

"There's a surer way than that, Dane."

"What's that?"

"I'll show you," Kris said.

Dane heard him moving, but it did not occur to him what was happening until the Ionian was upon him. He came about with a startled yell. Kris' fist hit him solidly behind the ear. Blackness came into Dane's mind. His last remembrance was of crawling painfully to his knees and being struck down again. After that he lay still.

Kris had to work fast. He locked the controls and found a space suit. Laboriously, he got the Earth-man into the suit and carried him to the air-lock. He opened the inner door, put Dane into the tube, and re-locked it. His hand closed on the release lever.

"Good-bye, my friend!" he whispered. "Be good to her!"

The lever came down. Dane floated away in the bulky suit. Jupiter's gravity immedaitely laid hold on him and he began to fall. . . .

Kris planted himself before the controls. He called Vanz.

"Pick up Cabot, Vanz. I had to trim my ballast!"

He watched the *Valiant* change its course. Then he went after East Bayard. Like a hornet, he dived upon him. Time and again the Earth-ship barely evaded his blind rushes. Then Bayard must have seen the warship hurtling deeper into the chasm, for he left it and turned upon the auxiliary. Immediately the tiny craft was pulling away from him. Bayard notched up his rockets a point.

They were traveling at terrific speed when the red walls loomed up ahead of them. Kris kept on, straight at them. Bayard clung to his tail, firing incessantly. At the last minute, the shadow-man flattened away and skirted the walls. But the Leader was a match for him, in courage. His own ship skimmed perilously close to the pure concentrate. It was that very courage that Kris had counted on.

Without warning, his ship swerved. Bayard could not realize what was happening when the Ionian headed straight at the wall. He had learned much about the red crystals from Benchley's notes, but one of the things he had not learned was the terrible explosive power of the concentrate.

Kris' ship dug into the wall, almost burying itself with its forward drive. For a split-second, nothing happened. Then the wall, for a section twenty miles long, belched outward as by volcanic action. Flames seared the air and heated to incandescence the ship in their midst. Smoke rolled forth in black billows. Great chunks of concentrate the size of hummocks were tossed aloft. One of those giant rocks struck the pursuit amidships. Against the boulder it splattered as a drop of molten solder splatters on a cement floor.

For the space of ten minutes there was violence and destruction. Then the last of the stones tumbled into the black core of the crater, and silence dwelt again in the Great Red Spot.

Out of the bedlam rose a single, silver ship. The *Valiant* had caught Dane Cabot on one of its loading doors and taken him in. Moving faster by the minute, the big warship headed home.

THE happiest day of Dane's life was when he went back to work as an ordinary chemist. With the Ionian colony established and The Hundred's undercover agents dragged out in the open, normalcy came back to the United Americas. But Dane refused a position of any kind in governing the new democracy.

"No more politics for me!" he told Margo. They were sitting on the porch

of their small home up the river from the Ionian city that summer evening. "I'll leave that to Dad and Vanz and your father. There's just one crusade I'm going to make before I quit for good."

Margo's golden head didn't move from its place on his shoulder.

"What's that?"

"Destroy these Biology Stations!" Dane said. "Think of the menace to our racial customs! In a few more years of this incubator system, every family album in the country will be no more than a glorified catalogue of mason jars!"

*(Concluded from page 9)*

FOR years the most fondly cherished hope of man has been the dream of some day controlling the elements, so as to eliminate forever such calamities of nature, as droughts, cyclones, floods hail storms, etc.

While still far from the accomplishment of this goal some progress has been made. Two American scientists have devised a method of inducing rain that has worked with moderate success in several tests. Flying through rain clouds they have sprayed electrified sand into them on the principle that droplets of water form about specks of dust.

Even the infinitesimal electron may serve as a nucleus of condensation in laboratory experiments. It was hoped that sand particles charged with positive electricity might serve to bring about the coalescence of vapor particles of clouds to form globules of the order or size of raindrops.

The expectations have been, at least in a measure, verified Scientific rain-making on a small scale is an accomplished fact. Whether more strides will be taken in the same direction remains to be seen.

ONE of the moot points over which scientists have been arguing recently is the nature of the brilliantly white spot which shows in photographs on the top of the planet Mars Some contend that it is an ice cap, while others are of the opinion that it is frozen carbon dioxide.

Maybe they are both wrong. Maybe this brilliant patch of white is, along with the canals, a signaling system to Earth.

THE ceaselessly changing physical construction of this world of ours puts to shame the imagining of various fantasy authors. For it has been definitely proven that the "solid crust" of the earth is far from solid; that the earthquakes which have been recorded in every sector of the globe are actually a manifestation of the comparatively fragile surface of the earth.

When we realize that the earth's core is composed of an incredibly vast underlying sea of boiling lava, and that waves from this mighty seething ocean cause the fissures in the earth's surface, we gain a truer appreciation of the limitless power still dormant at the earth's core. These mighty vibrations, while losing ninety-nine per cent of their power in their passage through the earth's crust, still retain sufficient force to demolish a city in one quake

But closer to the source of these vibrations lie the anchorages of earth's continents; and many scientists hold the belief that the gradual shifting of the continents of the earth is from the tremendous battering blows aimed at their bases by the waves of lava breaking under the floor of the ocean. The terrible power at the earth's core, the shifting of the continents year by year, the fragility of the earth's crust, these sound like the component parts of a rattling good science fiction story. Well—maybe they are.

HAVING reached this point, we see that we must leave you for another month, but confidentially, we are glad we've reached this point! Because, if you don't think that big New Year Issue is going to be a headache to make-up in time for the deadline, you've no imagination—and what are you reading science fiction for, anyway?

So keep your eyes peeled for the big book, and let us know how you like it. Until next month, think of your editor—sleepless but happy! *Rap*

"Tropical fish are a hobby with me."

The Emperor's gun flamed, and his henchman went down, his face a ghastly red blot

# BANDITS OF TIME

## by RAY CUMMINGS

"I LOOK like a tramp, Doris," I said. "Like a bum from the bowery."

We sat on a bench gazing out at the moonlit Hudson River with the glittering George Washington Bridge before us. I was dressed in a greasy tattered blue serge suit, a peaked cap pulled low over my eyes; no collar, and I hadn't shaved for four days. My name is Bob Manse. I'm a Shadow Newsman; my job is to ferret out undercover stuff. I was going to do some of that ferreting later on tonight.

Doris Blake didn't mind how I looked because she was blind. Only yesterday the bandages had been removed from her eyes after an operation. She had been blind from birth. The surgeons had thought now that they could give her sight—and they had failed.

Her hand went out to touch my face, now as I joked about my looks. "Just the same, Bob—I—I do wish I could see you." She was smiling a twisted, pathetic little smile. And then she tried bravely to turn it into a whimsical grin. "That surgeon said I was born too soon. In a hundred years or so, science would be able to fix my eyes."

"Fine," I said. "We'll wait, Doris—gives us an excuse to live a long time . . . There comes the Albany Night Line, just coming under the bridge."

Eyes of the blind. I had sworn I would be her eyes, for all the rest of our lives. We were engaged, planning to marry next year. She had wanted to break it, now that the operation had

**Out of the future came grim kidnapers. But why were only unfortunates the victims? Blind; down-and-out; fugitive . . .**

failed.

A man slouched past us, hesitating as though listening to our talk. Then he passed again, sat on a nearby bench, then on one still closer. Staring at us; at Doris' slim little figure, her pale-blonde gentle beauty. And then he came and sat down beside me.

"You look as though I could interest you," he said softly. "I am looking for young men and young—women."

He was a queer looking fellow, something about him so indefinably weird that involuntarily I hitched away from him on the bench, staring at him blankly. He was big, as big as myself and I am a good six feet tall. Wide, high thin shoulders—his figure lean, but with a suggestion of immense power. His clothes were queer—a suit, jacket and trousers of a black material that seemed to pick up and reflect the sheen of starlight. His hair was straight, black glistening like polished leather. He wore a white ruffled shirt, ruffled neck-piece edged with black.

But more than any of that, it was his face and his voice that startled me. Smooth-shaven face, lean, perhaps handsome with high-bridged nose, thin wide mouth, high cheek bones and deep-sunk dark eyes under thin pencilled brows. I try to recall it now. A face without age. Twenty—or fifty? The skin was smooth—the smooth, unlined skin of youth. But the greyness of age was in it so that here in the moonlight it had a waxen quality — like a man bloodless. A man who had died.

The thought stabbed into me as I heard myself murmuring:

"Interest me? How is that?"

His luminous gaze roved my shabby clothes. His lips drew apart with a faint ironic smile.

"You would like to improve things?" he suggested softly. "Life is not so good, for you and the young—woman?"

Queer voice. Measured words, with a strange rhythmic intonation. A voice so unusual, so unnatural that surely I had heard nothing like it before. He was smiling more broadly now.

"I can offer you a chance at a life—quite wonderful," he added. "You and your—woman."

Doris murmured,

"Bob, who is that? What does he say?"

"My name is Tork," the man said quickly. "Just—Tork. I am glad to meet you, my dear. You are blind?" His voice gave a little hiss of commiseration. "Terrible misfortune. But that can be fixed, that and all your other troubles. Do you want to hear more?"

He was a foreigner, an Oriental perhaps. A charlatan who now would see if, despite my down and out appearance, I might have ten dollars he could get away from me. I grinned at him, but I hitched myself forward on the bench so that I was squarely between him and Doris—so that his weird gaze might not rove over her.

"Go ahead," I said.

"I AM building a New Era," he responded slowly. "A little New Empire. We need—converts, you see? Men and young women. A new life, no troubles, no worries. The Empire of Tork. You two will like it, I am sure. Just to live—for love—with no troubles—no struggle. Everything you need or want is provided for you—"

Recruiting us into some Love Cult? Many fanatics have been lured into that sort of thing. Giving themselves into the hands of tricksters; and giving all their worldly possessions. There might be a news story in this. The Empire of Tork—that was a new one.

"What's it cost?" I said. "And where is it?"

"Cost? Why, nothing. Nothing at

all. We need only you—to help us populate our realm. Where is it? Ah, that I will tell you when you come to our meeting place of those who would perhaps join us. It is not far from here—"

He described a place hardly more than two miles away, where the upper reaches of Washington Heights look down upon Spuyten Duyvil creek and there is still a little open country with patches of woods crowded by the growing city. The time he named was 3 A. M. tonight.

"You will come?" he said. "But let me warn you to say nothing of this." His eyes seemed to gleam with a new intensity. "We have ways of knowing whether or not you play fair—and ways of punishing. And we want only eligibles like you. We choose very carefully."

"All right," I agreed.

"And the young woman—she will get her eyesight. That I promise you. You think I talk wild? You are mistaken." He stood up suddenly, smiled and with a queer, jerky little gesture, saluted us and turned away. My gaze followed him; and again I had that feeling of an indefinable weirdness about him. His walk was measured, as though he were carefully calculating each step.

Doris was gripping me.

"Oh Bob, what did all that mean? He said I could get my sight—"

Poor Doris, clutching at any straw.

"I'll tell Jim about it," I said. Jim Blake is her brother; his desk was in the same newsroom with mine. "We'll go take a look at that meeting, maybe."

I took her home presently,. She and her brother had an apartment here in the neighborhood. He was down at the office now, I knew. I left Doris there alone; went upon my routine job downtown.

IT was nearly two A. M. when I reached my desk. Blake was there. A fellow about my age; red-headed, freckle-faced; blue-eyed, pugnacious. Usually with a grinning, breezy manner. But he wasn't grinning now. Soberly he tossed a sheaf of the latest newsflimsies at me.

"Take a look, Bob. Something damn queer going on tonight. Green thinks it's some kind of a joke—the humorous angle for him—"

Young Pete Green, at the desk next to us, let out a guffaw. *"Costume Ball Disgorges Peeping Toms*—there's my catch-line. Pretty neat? I'll be on the air with that at 8 A.M."

"The eternal comedian," Blake said. "I'll be damned if I see anything funny in it."

I riffled through the flimsies, noting the items he had marked. Occurences all within the last few hours; all in New York City and its suburbs . . ." *"Redskin climbs to porch roof. A marauder garbed as an American Indian . . ."* And another: *"Girl frightens burglar, fantastically dressed as Colonial Soldier. Janet Scudder (19) was seized by a man in the costume of a Colonial Soldier . . ."* And another: *"Man in weird costume tries to abduct farm girl. Mary Hoskins, eighteen, is in Centerville hospital, recovering from attack by unknown assailiant in fancy dress futuristic costume.*

Items of humor? There was nothing funny in them to me. I sat staring, with a vague shudder. An office boy came with another sheaf of flimsies. Blake gasped as he glanced at them. This time, several girls were missing; a girl had been heard screaming. . . A running Indian, two-thirds naked, painted-smeared, had flung a tomahawk at a policeman. With unerring precision, at a distance of a hundred feet, the policeman's skull had been split as though

it was an apple.

Nothing funny in that. Nor another: *"Patrolman John Cafferty, 28th Precinct, found dead in alley. No wound except queer burned spot on forehead as though from electrical high voltage contact. . . ."*

I drew young Blake aside; told him of the man who had accosted me up on Riverside. He stared numbly; and suddenly we were both shuddering.

"Dead people—" he murmured. "Or —or—"

Or what? Wild thoughts were in my mind. Was this some band of normal criminals, fantastically garbed? What about that Indian's skill with a tomahawk? That weird burned spot on the policeman's forehead? The man on Riverside had said: "We need young men and young—women." More than once, that queer emphasis, young—women. . . .

"Well—" Blake murmured again. "Good Lord, Bob—something supernatural—"

"It was two-thirty A.M.

"He said three o'clock," I told Blake. "Shall we go? Or tell the police?"

It was possible of course, that the man who had met me on Riverside had nothing to do with these attacks upon girls. And his talk to me might have been a hoax. Or, to the contary, there might be a big news story here, which we certainly wanted to get unaided if we could.

WE told no one of our purpose. It was just before three A.M. when on foot we were approaching the region which the man who had called himself Tork had designated. Ragged trees, rocky terrain lay ahead of us, a long and then precipitous slope which ended down at winding Spuyten Duyvil Creek. Clouds were overhead now; the night was darkening. The little creek, far below us, spanned by its several railroad bridges, was a silver thread, darkening as a cloud patch effaced the moon. The yellow-lighted city behind us faded as we entered the woods.

"This ought to be about the place," I whispered.

We melted down, crouching in a thicket. The silence was queerly heavy here, surrounded by the great throbbing city. Its faint blended hum was audible; and the distant grind of trains rounding the curves, crossing the bridges, sometimes with a spluttering glare from the third-rail contacts. . . .

"Bob—look—" Blake's whisper was in my ear, his hand on my arm. We tensed, crouched staring. Ahead of us in the gloom a figure had appeared. Short, thick-set man in an ancient Dutch costume. He had an old fowling piece in his hand. He stood with his back to a tree, peering down the slope. Then suddenly he moved into a deeper shadow and vanished.

"Shall we follow him?" Blake whispered. "Or shall we—"

He got no further. The words died on his lips as he sucked in his breath with a little gasp. Ahead of us in an open space where for two or three hundred feet there was an oblong patch of level ground devoid of trees, something was appearing. The ghost of a ship. For a second or two it looked like that—a shimmering wraith of cylindrical hull a hundred feet long and twenty feet or so high. Fantastic—the skeleton of a ship and white shining ribs. Bars crossing its long line of little windows; a bulging front bow-end, with a round protruding turret.

All in a second or two it materialized, with a faint humming coming from it. Then the humming ceased. Blankly we stared, transfixed. The thing was real, lying there a hundred feet from us.

Long, low dark shape now.

Lightless. Soundless. No! There was the faint sound of a frightened girl's voice; then another, checked by a low gutteral command. And the sound suddenly, of a metal door grinding open. An oval doorway yawned in the ship's side; the figures of men came out.

Three A.M. A distant church spire in the city behind us boomed the hour, floating here on the heavy night-air. Abruptly figures were around us in the woods; arriving men. A man carying the limp form of a girl. From the ship a tiny beam of white light struck on them. Tork! I recognized him. But more than that Blake and I both recognized the unconscious, inert girl. So great a horror swept me that for a second the weird scene blurred before me.

*The girl was Doris!*

BLAKE and I leaped to our feet together. Neither of us were armed. We did not think of that. There was nothing save the horror of Doris being carried into the doorway of the weird ghost-ship. I recall that I shouted wildly, and that Blake seized a rock which he flung in futile frenzy as we ran forward.

But suddenly we stopped. Blake stumbled, fell and lay twitching, jerking as though he were bound by invisible ropes to the ground. A second later the thing hit me. A force; it seemed to jump from the ground into my feet—or from me, flowing down into the ground. My feet struck. I swayed forward, then back. With all my strength I lifted one foot, but it snapped back to the ground. Rooted there. A chuckling laugh came through the darkness. A voice said in queer, clipped English:

"Not to kill them. The master says bring them. The time-ship leaves in one minute. There is no other stop until the end of the voyage."

Weird figures engulfed Blake and me. For a moment we fought widly. I saw Blake being carried bodily as he struggled. Then something was crushing on my head. My senses faded, with just enough consciousness left so that I was aware of being hoisted into the dark doorway. It slid closed with a soft grind of metal. Then there was a faint throbbing hum—and a shock hurled into all my body so that what little consciousness I had left was flung from me.

My senses must have come back within a few seconds. I was aware throbbing hum—and a shock hurled window near me. Then it faded into night again. The daylight and night of Tomorrow!

I was being carried through Time!

## CHAPTER II

### The Voyage of Two Million Years

I had been carried forward, into the round turret room at the bow of the ship. The humming had faded now to a faint throb. With full returning consciousness I found myself lying on the floor grid.

The figures of men were here in a flat, dead-gray luminescence—a roughly clad, bearded fellow who squatted near me, smoking a weird-looking pipe, with a small cylinder weapon on his lap; and a group across the circular room, playing some sort of game with a board between them. Incongruous figures, their dress suggesting the past of New York City, and its future.

Their murmured voices sounded with fragments of English, yet so different of wording and intonation that some could barely understand the others. Comrades they were, but they seemed

from worlds far apart. Yet there was one thing all of them had in common—men of villainous look, criminals banded together here by a common outlawry.

Their rough laughter rose at intervals. Drink was in a great flagon beside them. Some of them were flushed with it. Then in the humming silence of the time-ship, from down the dim, opalescent corridor came the murmured frightened voices of girls. One of the men laughted raucously.

"Our big day, when we arrive, eh Greggson? Hope I get a good one—it will be nice to start married life again."

At the ship's controls I saw Tork sitting, with a great bank of whirring mechanisms before him—levers and little switches, electronic pressure guages and whirring time-dials. Weird, almost gruesome figure now with the glowing opalescent light tinting his sleek black clothes. His grim, hawk-nosed face was gray, bloodless in the light-sheen. He turned to survey the man who had spoken.

"The drawing will be fair, you may be sure of that, Thomass."

The group assented jovially. The one called Greggson—a burly, bullet-headed giant in red silk shirt, blue tight trousers and big flaring gaudy boots—retorted ironically:

"Quite so, Master. And you, crowned Emperor and for Empress we have Rhadana? She is worthy of any man – I would like her myself." He raised his cup with an applauding gesture. "To Rhadana—Mistress of the New Era. If I had lived in 5140, where she came from, I might have had her myself, long before this, eh fellows?"

Then I saw Doris sitting in a little chair across the room; Doris with terror on her white face, but seemingly unharmed. And beside me here on the floor, Jim Blake was lying. He was hitched up on one elbow, aware that I had stirred, that my eyes were open; and his hand touched me.

"Doris, she's all right," he murmured.

"Yes, I see—"

Our guard heard us and called Tork. He left his dials and came with a pounce, standing over us.

"So? You have recovered?"

"Yes," I said. "What's the idea of this—you—"

His waxen hand, with long lean fingers heavily jeweled, rose to silence me.

"So you would trick me? Telling your friend—"

The red-shirted giant across the control turret suddenly laughed,

"What will we do with them, Master, Why not kill them? Or should we toss them out?"

Tork's thin smile widened. "They shall be the first criminals of the New Era. That will be interesting—punishing them with death after our festival. "He stood with his eyes flashing as he drew himself erect. "And it will show the rest of you that Tork will tolerate nothing."

HE turned, went back to his controls; and as he passed Doris, his hand lightly touched her hair with a caress. It made her cry out; and Blake exclaimed:

"You let her alone, damn you—"

"Oh she shall not be harmed," Tork smiled. "She is too gentle. . . . You two —sit with her, if you like. You want them by you, little Doris?"

"Oh yes—yes, please," she murmured.

"Whatever you wish," he said grandiloquently. "You see, little Doris, how kind Tork can be to you? It will be that way, always in our New Era. Look out the window—certainly there is much to see. You can tell her about it," he added to me.

We sat on a little metal bench beside Doris; whispered to her, comforting her. How terrible all this must have been to her, in her eternal darkness! Tork quite evidently had followed her and me when I took her home; and then he had gotten in, seized her, with a drug that had rendered her unconscious. . . .

"Two thousand ten," Tork said suddenly to his men. He chuckled. "We are making speed—and no more stops, this trip.

Blake and I stared out the window between its luminous, faintly humming grey bars. During all this time I had been aware that at first there was alternate light and darkness outside—brief periods which marked the passing days and nights as we sped into Time. There was a steady acceleration; light and darkness which soon were brief puffs. And then their speed blended them; a greyness outside. I had seen a green tinge to it, alternating with white—the summers, the winters, and then they too were blended into drab monochrome of grey as the years, merged with one another, sped by.

I stared, breathless, awed and then with murmured words tried futilely to describe it to Doris. The ghostly grey outlines of the landscape and the city outside our window were changing with a slow flow of movement. Great shadowy buildings rose. It was a strange form of movement; things melting down, leprous and in a second gone, and others, always larger, rising to take their place.

The time-dials in front of Tork were whirring. The dial for the years was a blur with its whirling pointer. Great New York!—It had flowed up and around us, engulfing us. Monstrous metal terraces, gigantic arches, buildings that towered into the sky. All grey with the blended daylight and darkness, winter and summer.

But now I could see spots of color. Buildings of glistening yellow metal which endured for a hundred years or more, and then were gone with something else replacing them. Great archways on which permanent lights were mounted, so that at least for what to us was a second or two, we could see the spots and glare of the lights.

Had the great city here reached its height? It seemed so. Down the slope, where the little Spuyten Duyvil Creek wound into the broad Hudson, all had been engulfed by the bridges, terraces and arcades.

Now we plunged into blankness. Great structures were built on this space we were occupying. A blankness here, with our ship perhaps within the metal itself of the vast structure. Then that was gone and we came again into the open.

THE great city at its height. I could envisage all the myriad little events transpiring here—the daily movements of millions of people here in these buildings, on the towering terraced streets. The giant vehicles in the air. A billion-billion little events, so brief that they were merged into a grey nothingness before us.

Beyond where the Spuyten Duyvil and the Hudson now doubtlessly flowed submerged beneath solid arcades under them, a monstrous spired tower swiftly rose into the air. Fifty years perhaps to build it. For what to us was a moment or two, it held on its top a great multi-colored beacon—a ring of red and green eyes. They endured—a hundred, two hundred years.

Then all in the blinking of an eye, the tower was gone. A leprous hole there; a grey leprous patch to the left and to the right; a blur down where a segment of the Hudson was exposed,

as though a litter of wreckage were lying there—wreckage which for a hundred years did not seem to be cleared away.

A monstrous cataclysm? I was murmuring it to Doris; and then I was aware that a man had come and was quietly sitting beside us.

"War," he said. "The war of 5550. So much destroyed, and there was no one left here with the heart to rebuild."

I turned to face him. His soft voice, with queer clipped accent was not like the rough voices of these other men. He was a smallish pallid young fellow, in a grey-white, embroidered tunic with tight cloth trousers beneath. His head, small and round, was surmounted by close-clipped blond hair. His face, smooth-shaven, was clean-cut, patrician highly intelligent.

"I am Georg Allaire," he said through thin lips. "Queer to stare out now at my time-world. I was born in 6000—just after the war. It was terrible—the end of civilization here."

Tork momentarily had moved away. Blake and I talked in half whispers to young Allaire. He had been a surgeon here in the unbuilt ruins of Great New York—a vassal state then of the Great Dictator. A surgeon—

His gaze went to Doris as he told us. And she heard him.

"Oh," she murmured. "And you will give me my sight? Could you?"

He smiled his gentle smile; and left us. He had freedom of movement here. He went down the grey, luminous ship's corridor. In a moment he was back.

With goggles on his eyes and an instrument in his hand, he examined Doris carefully. More than four thousand years of medical progress!—My mind, with expanded viewpoint, flung back to my own unenlightened time—our physcians and surgeons, back there in 1950—what puny knowledge they had possessed!

Then Allaire nodded, spoke strange medical words which we had no way of understanding.

"A simple growth-spore," he said. "Non-malignant, but it desensitizes the sheating of the optic nerves. I could remove it in half an hour. How terrible and stupid that it should have been left there so long."

I held Doris as she trembled with her happiness. Blake leaned closer to Allaire.

"You're not like the rest of this outfit, "Blake whispered. "How did you happen to—"

"I had trouble." Allaire's smile was a little wistful. "I was glad to escape."

"Where is he taking us?" I demanded. "His New Era—"

"Yes. You'll see." He suddenly felt perhaps that he should not tell us too much. He had made several trips on the time-ship—from the New Era, back almost to the first coming of the Indians on Manhattan Island. Gathering supplies. Stealing things of science. Recruiting men. . . . Stealing women. . . . A new civilization to be built by Tork—its Emperor.

"Only some five hundred of us men are there now," Allaire was saying. "And we're taking thirty women this trip. Several hundred have already been taken. That will be enough, they say, for the drawing, when we get there. The men are very impatient."

His slow smile was whimsical.

"They have made me the physician and surgeon. We had casulities this trip. One of our men was wounded when we stopped at 3000. And back in 1950( where you came aboard—one was shot with what I hear you call a bullet a leaden, base-metal chunk. I am afraid he will die."

Tork suddenly joined us. He saw the optical instruments in Allaire's hand.

"So? What is this?" he demanded.

"Her eyes," Allaire said. "I am going to give her sight."

"Oh you are?" Tork's grin was ironic, but his eyes gleamed with a suppressed fury. "I do not wish it."

"Why," I gasped, "you told me—"

"I have changed my mind." He bent with his jeweled hand touching Doris' head. "I think I would rather have her without sight," he said. "Do not be too unhappy, my dear. There is little to see of any glories where we are going. You will stay by me, and I will be your eyes. And you will know what a wonderful man is Tork—your Master, and yet—your servant."

His hand toyed with his belt where a tiny weapon of gold, jewel-like, hung dangling.

"I should kill you, Allaire," he added calmly. But I won't. I need you. Go attend our men who are wounded."

He turned away. Allaire leaned over me.

"I'll find my chance—I'll fix her eyes."

THREE days of our trip passed. They were awesome days indeed. Since we could not possibly escape, Tork ironically gave us a fair freedom of movement. Much of the time we spent with him in the ship's glowing, humming control turret.

There was something queer about him—something that I could never quite seem to fathom. He radiated power, yet with it there was a simple childishness. Pleasant enough with us—and then he would gloat that we were his first condemned men, to be put to death at the great festival the night of our arrival. Our deaths—with ghastly torture which he delighted in picturing—would show all his men what a wonderful Emperor they had in him. And that he meant it, and would do it with the same smiling irony, I could not doubt.

There was a woman here who ministered to Doris. The woman Rhadana—she whom the red-shirted giant Greggson had toasted as their future Empress. She had joined Tork's band during one of the stops—at 6140. I recall my emotions when first I saw her. Tork had given me a little cubby alone, and Blake the one next to it. It was near the first time of sleep; and Rhadana came with food for me.

"You are called Bob Manse?" she said softly. "Here is your meal."

She had very much the same clipped accent as young Allaire. But her voice was throaty, purring. I had been staring out of the barred window of my dim little room—staring at the vast panorama which the changing centuries were bringing to this little vista of Space. The great city had risen to its height, been devasted by war most horrible—war that all the perverted genius of science could make terrible beyond anything my mind was capable of understanding. For centuries the city had lain in ruins, its despondent people the vassals of tyrants.

And then the city began to rise again. Perhaps a different civilization. I saw rising what seemed great pyramids, with their apex sliced off, with streets run-

---

* Scientists -especially the new order of metaphysical-scientists—are agreed on the principles of Space-Time The future is not a thing which *will exist*. Rather it is a thing which *does exist*—all events from the Beginning to the End, spread in a record upon the scroll of Time. All with a different, inherent vibration-rate—all, so to speak, in a different state of Matter.

The Bleroid time-ship changed its inherent state of Matter, thus sliding by natural law into the time-world with which it then was compatible. The vessel was the first of its kind known to his time-world. Invented by the Bleroid Family—Bleroid 274-Y—in the year 6042.—Ed.

ning along their steplike terraces. Another monstrous city, with buildings as far as my vision extended—great structures a thousand feet or more in height, with parks on the tops. And all the original grounds and the rivers again covered with the tangle of traffic arteries.

THE time-ship's acceleration seemed to have reached its height now. Structures which endured only a hundred years were melted together in the scene before me. Everywhere now there was a vast stir of things changing. And then there seemed a pause. Mankind on the height. Perhaps it was so all over the world. Peaks of civilization—the genius of man's accomplishment taking him to the height. And there he was resting, content. A thousand years? Two thousand? And then the inevitable decadence began.

And I saw the triumphant city come down. Faster, faster through the centuries.

Through the window of my cubby I was watching it. The city here—perhaps the pride of all the Earth—at last sank back into a blur of ruins, decay and desolation.

"You are called Bob Manse?" the voice at my doorway repeated impatiently. "Come, take your meal."

I turned to face the woman Rhadana. Amazingly voluptuous creature, this harlot from the city of 5140 A.D. A blue-colored cloth was wound wide around her swelling hips, with a tasseled sash hanging knee-length down one side. Sandals were on her bare feet. Her torso was bare save for breast-plates of gleaming metal and a low-cut collar of cloth, covered with shining little golden coins, flat on her upper chest and cut wide to cover her shoulders. Her black hair, glistening with oil, was braided and coiled on her head, with a gauze headdress of crimson which fell like a bridal veil down her back.

And there was in her eyes as she stared at me, all the lure which her aspect promised; and a little mocking half-smile upon her heavily carmined lips.

For that instant, startled, I blankly stared; and then I took the terraced little tray of food and drink she proffered.

"Thank you. You are Rhadana?" I said.

"Yes. You have heard of me?" She lingered in my doorway, a jeweled hand on her hip.

"The blind girl, Doris—you have been kind to her, she says. I thank you."

"Oh, she?" Her gesture was of faint contempt. "A sweet little child. She wants her eyesight. Tork should let her have it."

"Yes, so I think. You are to be the Empress of the New Era world?"

She nodded carelessly. "And Tork the Emperor." She was looking at me strangely; and suddenly she glided forward. Jewels hanging on a bracelet at one of her knees tinkled. Suddenly her hand went out and touched my shoulder. And she added furtively, in her queer throaty, purring voice:

"I have been watching you—Bob. I can see you are not like these other bellystabbers—more like that Georg Allaire. Except—"

Her hand lightly caressed my arm.

"Except—that you are more of a man," she finished. "I am to be Empress, you see? That is why I joined this—adventure. Power to rule. How I have always wanted it— and now I am going to have it, you see?"

"I see," I said.

She was suddenly breathless.

"To rule with Tork!" She spat it out. "And he is less than—"

She checked herself. What was this? I couldn't imagine.

"I have some ideas," she suddenly added, still more softly. Her furtive gaze back to my door made my heart began to pound.

"What?" I murmured. "Ideas of what? Surely you realize you can trust me, Rhadana?"

She nodded. Stood staring at me an instant, with her bosom rising and falling with the emotion of her pondered plans. Whatever they were, it seemed to me suddenly that I could use this woman, perhaps to escape with Doris and Blake. Did she hate Tork, and yet want to be Empress of this new world?

"We will talk again," she murmured. At my door she regarded me again with that mocking little half smile, and then she glided away into the luminous humming corridor.

TWO days; two nights more of that weird fantastic trip. The first time of sleep was over. And all through those next hours of existence as we were living it here on the ship, I stared out at the tumbled, blurred ruins of the great city. The hills and rivers here were obvious now. Changed, eroded contours from those I had known in my own time-world. Ruins of a city. Storms were burying them in silt.

Then there was a cataclysm. For a time it seemed that water was here; but then it receded, so that off to the right the huge Atlantic ocean was rolling up, grey and blurred, fairly close to us; and to the left, the buried city sank under silt and tangled vegetation.

Our forward acceleration was slowing now; a retardation of time-flow for a while more rapid than our acceleration. And the scene which I had thought was empty, now suddenly began to show movement again—transitory little structures that man was struggling to erect, which could endure perhaps hardly a century. I could see them rising, then breaking and melting away. And others coming. Always smaller. Enduring now only a year or two, but our slow velocity at last made them apparent; crude little dwellings.

That day passed for us; and still another time of sleep. The time-dials were nearing two million A.D. when the sound of tramping feet and the frightened voices of girls aroused me, made me realize that we were almost ready to disembark. In the control turret, Blake gripped me.

"If only we could get Doris away from them," he whispered. Get this damned ship and run it back. I've been studying how it operates, Bob."

"Yes, so have I. If only—"

Futile plans. The big red-shirted fellow named Greggson was watching us now, a leer on his face, his hand at a weapon which dangled by his side.

"Almost there," Tork said. "Two million and ten A.D. The New Era. The world of Tork—Emperor of the Earth.... Oh, there you are, little Doris. Come here by me. You see how fortunate you are that Tork likes you."

Rhadana brought Doris to us, evidently at Tork's command. The woman flung me a furtive, seemingly significant glance, then glided away. Tork did not see it, but Blake did.

"What the devil," he whispered.

"Quiet, I'll tell you later. Just a chance for us, maybe."

Tork called out a warning and flung the last time-switch. My senses reeled. Down the corridor, I could hear the voices of the captive girls crying out, and Rhadana quieting them.

Then the humming was gone. The luminous, opalescent ribs of the ship were solid and dark-grey. Through the barred window, a dull-red sunlight was

streaming. And sounds were floating in. The shouts of men—Tork's comrades here—calling out in greeting. And other voices; the voices of the natives here . . . our descendents—yours and mine.

As Tork and Greggson shoved us out through the oval doorway and down the incline, Blake and I stood numbed, gasping at the weird sight.

## CHAPTER III

### The New Era

THE sun was low in the west—a huge dull-red round ball. It looked startlingly close, and sullen; lifeless. The cloudless sky was a sodden bronze. The landscape had almost nothing in it of any familiar configuration, save that the sea was at the east—a glassy, oily-looking surface, with the red-bronze sunlight on it.

Undulations of almost naked, rocky hills, with stunted trees; and to the west a great eroded canyon with a babbling ribbon of dark water, far down.

Instant impressions. Then my gaze swept to the babbling throng that pressed close toward us on the rocky slope. Humans? Our ancestors. Men and women. . . . Women carrying children in their arms. . . . Adults hardly taller than my waist. Ghastly little things. Naked lumps of flesh—grey-brown skin, covered with scraggling, mangy-looking black hair-growth. The heads were round, over-large. Bulging forehead; big brain-pan, with large brain, most of it long since atrophied.

These weird humans stood milling on the slope—a thousand of them perhaps. Mankind reverting to savagery? Already they were beyond that; merging into animals. Yet not quite that either. For somehow on them was stamped the traditions of their heritage of transient glory, lost now so that they were helpless.

Blake stood gripping me.

"Those—the people here? Is that all that's left of mankind?

It was, undoubtedly. Perhaps in the struggle, the animals, birds, insects all had died. Certainly we saw none of them. The little babble of human voices rolled at us—brief fragments of sounds, animalistic. Like a chattering, milling throng of apes they stood with frightened curiosity, staring. Lumps of women, wide-hipped with flowing tangled hair half enveloping them, held up their little lumps of children to see us better—children with round, wondering faces of staring dark eyes. All staring with apathetic gazes, dulled by the blight of the centuries.

"Get back there!" Tork was roaring. "Out of the way—you—get back!"

As though scattering a group of domestic animals, he lunged at them, waving his arms; and before him, with frightened squeals, they ran. I could see, off by the Hudson-canyon, little mounds of stones piled into the shape of dwellings. The scurrying figures ran into them; and into holes in a nearby broken cliff. A patch of stunted woods was nearby; trees on which food might be growing. And there was a distant field. A little agriculture left. Blighted; pathetic. . . .

THE red-shirted swaggering Greggson shoved at Blake and me.

"Come on, you two. Your house—" He laughed racuously. "Your last day—you might as well get what comfort you can."

I suddenly resisted him.

"I'm going with Tork—Tork and Doris—"

Men were bringing the girls out from the time-ship now. Amazingly hetero-

geneous group of swaggering villains —and amazing captives. . . .

Two or three girls of my own time-world. And my future, and my past. There was one with long flaxen braids —a little Dutch-American costume of tight bodice and flaring skirt. Another —half naked Indian girl of Dutch Nieuw Amsterdam. A man was dragging her as she screamed with her terror; and then he cuffed her into silence.

They passed around an angle of nearby hill. Close to us, Tork was leading Doris with an arm around her. I saw the slim dark figure of young Georg Allaire, enveloped now in a dark cloak, press close after them.

"You let us alone," Blake was protesting to Greggson. "You—"

Then Tork heard us.

"Bring them," he called. "This way, Greggson."

In the light of the dying red sunset, we advanced around the corner of the hill; and then upon us there burst a new amazing sight. Tork's village. His new civilization, here in this aged, dying world. His New Era.

Like the captive girls, and the motley bandits themselves, in this little group of fantastic dwellings there was the blending of the past ages when man was glorious. Perhaps a hundred small structures had been erected here. Weird metal houses, like fantastic shanties thrown together of the small parts of other structures which had been brought here. Some, with lean-to walls of shining metal, had roofs of crude thatch. Or a wall of alumite, glistening like burnished copper in the red-bronze sunset, with oval window set with prism-panes to catch and fling the light inside —and incongruously the adjoining wall was of piled stones.

Motley, half finished little dwellings, waiting for more materials to come that they might be completed. They were set in rows, with a curving street or two between them. A broken statue stood ludicrously askew at an intersection—a pilfered work of art brought here from some past age. Platforms, hastily built of handsome colored marble blocks, had been erected at the end of a street.

Lights were winking on now—the glow of lights in windows—soft radiance from braziers in the street, with crudely connected wires leading to strewn batteries lying in a nearby heap. From a cliff close by, a light projector suddenly flashed on, like a rainbow bathing the village in prismatic splendour. And a great brazier of incense —the toy of some past voluptuary—cast off its exotic odor, wafted by the heavy, sluggish night-breeze.

Some five hundred of Tork's men were here; and now perhaps as many maidens. I saw a long, rambling shed of thatch patrolled by armed guards, in which they were confined. The thirty new arrivals were flung in there; waiting for tonight, the choosing of mates for the population of this New World.

I SAW Tork now with his arm around Doris as he led her toward one of the strange half-metal houses, with Greggson shoving us after them. Did Tork want Rhadana—or Doris? Why was he so ironically gentle with Doris? So ironically anxious to please her? "I am your Emperor—and your servant." I had heard him say it to her several times. And why that burst of rage from him at the idea of having her regain her sight? Why should he like her better—blind?

Guards were pacing in the red-bronze twilight outside our little house when Tork left us with Doris—and with Rhadana here to give us our supper.

"Your last meal," he told Blake and

me with his twisted, ironic smile. "Have Rhadana make it a good one. You shall see the choosing of mates. And then comes your great honor—the first criminals to be put to death here. You will go down in history for that." He thumped his chest, on which now a miscellaneous collection of little pilfered ornaments were fastened, to denote his rank. "The history of Tork's New Empire—and I am writing it now. And tonight your names go in it."

A madman? Was he that? I stared at him. "Stop that!" he said sharply. "You—you—" As though a stab of terror had gone into him, under my stare. Then he turned. "I am busy with arrangements. I will come for you later."

The woman Rhadana—queerly incongruous in her voluptuous garb as she quietly moved about her tasks—was preparing us the evening meal. In a corner of the ramshackle room—its metal walls sloping, its thatched ceiling askew, with metal furniture and luxurious colorful drapes representing a dozen past ages—Blake sat with Doris. We knew we could not escape from here. The watchful guards outside were armed with weapons of what diabolic lethal power we could only imagine.

And suddenly the dark-cloaked Georg Allaire came in. His little instrument-case was under his cloak.

"I will give her her sight now," he murmured. "Only a few minutes with the facilities I have here." He was pale, intense, his eyes burning. "Have no fear—his vengeance will come on me—not her."

He led Doris, and young Blake with them, into an adjoining room. Just the simple removal of blighting, clinging spores.

I started with them, but abruptly Rhadana checked me.

"You—Bob—I am ready to talk now." Again she was breathless with her emotion. She swayed against me; her heavy, exotic perfume enveloped us. "You like me a little?" she murmured.

"Why—why of course, Rhadana."

"Because you are a man—of course. I will be Empress here. It was my idea—" She breathlesly paused. Her eyes darted like daggers—like the little jeweled dagger that suddenly her jeweled fingers were gripping. "My idea—I would like to have—you for my mate. The men would not mind—not with the promises I could give them." The mocking half smile played on her lips. "I have always been able to control men. I could—promise them much—"

"And Tork?" I murmured.

"Tork. To him will I attend—you need do nothing of that. He—can be killed. A stab—and the acid I have, to melt him apart. I know him—you see? He is—"

A faint cry from Doris made me whirl.

"Just hold still—just a minute," Blake's voice was saying with harrassed anxiety. "He won't hurt you, Dorrie—just a minute now—"

I RUSHED in to them; stood silent, breathless. Miracle of science of the year 5,000. Spores that could be killed with a gentle light-beam. . . .It was no more than the effort of a druggist, in my day, removing a cinder from a woman's eye.

"All right," Allaire said at last. "Now—I'll wash them out—and then the vapors—"

Doris, now with closed lids, stood trembling.

"You take her," Blake murmured to me. "Take her to the window."

I stood with her, holding her trembling body against me as she opened

her eyes—opened them, closed them again—and then was blinking, staring with wordless wonderment. Strange trick of fate that after a lifetime of darkness her first vision should bring so weird, fantastic a sight as this beyond our window—the motley little street in the red-bronze twilight with the prismatic rainbow of the distant projector bathing it.

"And what is this?" Tork stood behind us. He saw Doris; he understood. For that second, so great a wrath was upon him that his contorted face seemed suddenly inhuman. There was a little hiss from his belt—a tiny darting point of light.

Quite visibly it floated across the room, struck young Allaire in the face; point of light which suddenly expanded to be a puff of blackness. Allaire stood wavering. His face was a ghastly, puckered black mask, with empty eye-sockets and goggling mouth.

Then he fell. Tork, with a burst of laughter, strode from the room. We bent over the dying Allaire. His groping hands found Doris, clung to her.

"I am very glad," he murmured. "You see—in my own world I was condemned to death—disgraced. I—tried an operation on the daughter of our ruler—hopeless but I tried it and failed. I am glad I could—help you—"

His breath suddenly stopped; he was gone.

We sat presently—Blake, Doris and I—at our little meal. The woman Rhadana did not join us. At the doorway, she stood somberly staring. The last meal for Blake and me. And for Doris—what? We had no chance to plan, even if planning anything could be more than futile, fatuous hope.

The swaggering giant Greggson came in and sat close to us, watching us with his grinning, leering gaze. He said little; but I noticed that his gaze often strayed to the watching, voluptuous Rhadana. Was Greggson too, planning something for tonight?

Tork's New Era! This new civilization where he thought that he could rule supreme! The irony of it struck at me. There is nowhere in the Universe—no time-world from the Beginning to the End—where man could go and avoid the passions of greed, love, hate, jealousy, because he brings them with him. Tork's Empire was hardly yet set up, and in this single room of this one little house all of us sat pondering, brooding with different motives—smouldering passions waiting the spark of opportunity to flare them into violence and bloodshed.

"All right, we start now," Greggson said suddenly. "You two men—I will take you."

FOR an hour past there had been the commotion of preparations outside. The red-bronze twilight was long—Earth had slowed its rotation as it sank nearer and nearer the dying Sun. There was still faint daylight in the west, engulfed by the glare of the village lights as Greggson, despite our protests, pushed Blake and me from the house. Other men leaped on us; shoved us along the weird, busy little street until beyond its end, we were flung to the top of a little dais, where we crouched with a red light bathing us.

At first, in the crimson glare, I could see nothing. There was just the vast murmur of blended sounds—voices, the tramp of feet, the faint hissing throb of the lectronic lights. Then my eyes grew accustomed to the radiance.

To one side, on a long platform, the lines of the several hundred girls were ranged. Indescribable collection of young females from a score of time-worlds. They were all still dressed in the garments in which they had been

seized, save that most of them were now partially denuded. Prismatic light, glorious rainbow sheen as though from a painter's palette, bathed them as they stood terrified, clutching at each other.

On each of them was a big ticket, with a number. The men were jostling each other, crowding around the raised platform, noting the numbers, calling out to each other the number which they hoped they would get. Roistering men examining the prizes now to be awarded them.

Facing the girls' platform at a distance of some fifty feet, a raised dais stood with its back against a dark little rock-cliff. Dais with a great golden, canopied throne. I sucked in my breath as I stared, and felt young Blake tense beside me. Tork was on the throne—Tork resplendent with pilfered stolen robe of red and ermine. And it was Doris beside him. Doris, gentle, dove-like with a great headdress and a long shimmering blue robe.

She sat white-faced. Her lips had been carmined; her brows heavily pencilled. Her eyes were wide; terrified, wondering—gazing at the fantastic motley world, incomprehensible to her.

The lights here were like a five hundred foot spot of rainbow. Beyond it, the dusk was gathering. Blurred stars were in the sky. The distant sea was a sullen surface of dark glass; the hills close at hand held purple shadows. And on the nearby slopes a great throng of the little lumps of humans were gathering. Like animals attracted by the lights—gathering, milling among themselves at a safe distance. Their jabbering voices blended with the other sounds.

Behind us, the strange village now was deserted, just a few spots of radiance in the house windows. And beyond the hill corner, the long dark outlines of the time-ship were apparent, merged with the purple rocky hillside behind it.

"The ticket-drawing," Blake muttered to me. "They're starting. Oh Bob—what the devil can we do—Doris there—if only—"

NOTHING that we could do. Here beside us our guards were alert. Then I saw, on the throne-dais to one side of Tork, the woman Rhadana was standing. Soft music from some distant point flooded the scene. Rhadana stood swaying to it, instinctive sway perhaps.

She was dressed differently now. Scarf around her hips; breastplates; and over her nearly nude body a flow of gauze crimson draperies. A shaft of light struck her sensuous face. Venom was on it as she gazed at Tork, with her hand sliding under her draperies to her hip.

And then I saw the burly, red-shirted Greggson. He was near Rhadana; watching her. And then slowly I saw him edging toward Tork.

The lottery. A huge brazier of cloisonné stood before Doris. One by one now, Tork was calling the men's names. One by one they came and Doris, reaching into the brazier, handed them a ticket. Their shouts presently were rising: then they were at the girls' platform, dragging down the girls which had been given them, embracing them—and standing aside in couples, waiting impatiently for Tork, their Emperor, to address them.

Some of the girls were passive, numbed; others struggled, fought with little whimpering screams against the crude caresses forced upon them.

Breathless drama, pregnant with silent expectancy that seemed about to burst into a scream. Tork was on his feet now, with Doris standing beside him. His arms raised with an imperious gesture as he made ready to address his people. There was a breathless in-

stant when I saw Rhadana silently drop her draperies. The prismatic sheen painted her milk-white body, clothing her with color. And now she was gliding forward; the light glinted on the knife-blade in her hand. But suddenly she stopped. Greggson had seen her. He gestured, and she slunk aside.

And then Greggson was raising his weapon. By some miracle Tork suddenly was aware of the danger. He whirled. Greggson's flash of weapon was met in mid-air by one from Tork —a little shower of red, green and yellow sparks with a tiny thunderclap. And then from Tork's belt some other ray spat. It cut through the spark-shower. Greggson's body fell.

There was a sudden shock of silence. Then into it came the muttering of the startled, angry men. Greggson; one of them, perhaps their favorite. A mutter as they surged forward. It was a little fire in prairie grass—it spread. A shout; a thrown missle; girls screaming.

I was aware in that pregnant second that the guards here by Blake and me had jumped forward. One of them called with a burst of profanity at Tork.

Blake seized me. "Come on! Around the back of that throne—"

WE JUMPED together. A hiss of radiance stabbed at us, but missed. It added to the turmoil—confusion—and in another second, chaos. Some of the girls had escaped from the men holding them. They ran, screaming. Down on the dark slopes the little watching creatures also were shouting, milling, surging forward to see better. A hundred or so of them, like stampeded, bewildered animals, came plunging into the light area. A little wave of them got between me and the throne. I plunged into them, scattering them as with squeals of terror they tried to avoid me.

Myriad things happening at once, in those crowded seconds. Up on the throne-platform, close before me now, Tork stood motionless, gazing down at the body of Greggson and then at the surging chaos before him. Tork, with an expression so weird on his face that it made me gasp. A stricken tableau up there. . . .

Doris, to one side, was crouching, huddled in her Empress robe—staring numbed, with a hand at her breast in her terror.

Tableau—and in it, only the voluptuous figure of Rhadana was moving; again with sinuous glide advancing upon Tork. And as he had been aware of Greggson, so now he was aware of her. With a little muttered scream of anger he whirled. Her white, painted body wilted under his flash—wilted and fell in a quivering heap at his feet.

In the distance I saw some of the men running now for the time-ship, dragging the girls with them. Between me and the throne there was a solid mass of struggling natives. Blake was gone; separated from me in the rush.

All in only a few crowded, chaotic seconds. The collapse of Tork's world. Up on the platform he was still standing stricken, on his face amazement, disillusionment, despair. Emperor here. Of what? Just chaos. And suddenly his face was contorted by ghastly rage —the maniacal rage of his disillusionment, his despair.

From his belt he whipped a jeweled weapon. It spat with a spreading, electronic blast. Amazing pyrotechnics of hurtling free electricity! It went out in a wave of crackling, sparkling color.

Other blasts from some of the running men came stabbing, but Tork's current beat them back. The air crackled and hissed with showers of sparks, gleaming in the lights. And then

the lights were extinguished. There was only the light of the sparks—crackling showers; pin-points of bursting stars high in the air, and on the ground.

Screams sounded. A spark-shower in an instant was over all the scene. Just a second when the running men and girls were stumbling, dropping, electrocuted by the free-electron, high voltage of the sparks that leaped at them. Sparks like living things in a torrent surging down the slope, blighting the running, naked little creatures. Blighting everything.

Tork, destroying his world.

With an eerie scream he turned his almost exhausted weapon upon his village. The houses shook, crackled with sparks, glowed with interference heat. The thatch roofs burst into puffs of flame. Then the fused, glowing walls collapsed. Rumbles, grinding little crashes of tumbling metal, mingling with the crackling, hissing of the sparks, every spark a million-volt exploding charge.

I HAD leaped to one side, crawled on the ground and then was up again with the first pyrotechnic shower going over me. And then I came to the side of the platform. Tork's weapon, suddenly dark, exhausted in his hand, went silent. With a wild, maniacal laugh he threw it away. From behind the platform a figure leaped up upon it—a man, seizing Doris. . . Blake! My heart pounded with a rush of thankfulness as I jumped up and Tork saw me; rushed for me.

Our bodies collided, with my arms around him. Weird, ghastly combat. What was this? My gouging fingers clutched his face. Weird smooth feeling —his skin, so queer. Then I struck him. Gripped his shoulder. It seemed to break. In that second his shirt tore. I saw where the flesh of his shoulder had split apart. Bloodless. His flesh? The substance there showed a reinforcement of wire mesh!

Man of the year 6,000. A man? The weird truth rushed at me, with memory of my own vague gropings, and what Rhadana had almost told me. Not a human man. Synthetic; built, moulded in a laboratory. Supreme product of man's inventive, scientific genius at the peak of man's skill—this Thing, cast with such ghastly irony in the fashion of a human. A Thing, made only to be a slave. And Tork had seen his chance to ape his human masters.

I had cast him off with a gasp of numbed astonishment. And as I stared at him, saw him partly smashed by my clutching grip, he gazed back at me. That same weird look he had given me in the house a while ago—his look of fear at me, a human master!

He felt it now, his helplessness. And with a wild scream he jumped from the platform, scrambled to a nearby rock. For a second he poised, with the gas-clouds rolling at him and the lurid glare painting him. Stood poised, gazing at the wreck of his little Empire. Balanced on the rock, fifty feet above us—and then head down, he dove. His body splattered on the rocks, ghastly, twitching, broken thing. The turgid green gas of the electronic fire rolled over it.

We ran through the choking clouds, Blake and I half carrying Doris; leaping over the dead and dying, passing the crumpled, wrecked little village—running for the time-ship. At its door I paused to look back; stood for an instant with my arm around Doris as we gazed.

The spots of light were dulling into little red glows. The heavy gas-clouds were settling –a great green-yellow, sodden shroud of death, so that under it Tork's Empire was gone.

# INSECTS—FRIEND OR FOE?

By ROBERT TINKHAM

**We cuss when mites do bite, but when we kill 'em, do we do right? Here're a few facts we all ought to know about**

FOR years we have been hearing and reading that mankind is waging a losing battle against the encroachments of the insect world. We have been informed that the yearly loss caused by food destruction by insects alone would more than meet the complete cost of maintaining our army and navy. Moths and beetles attack our clothing, furniture and stored goods. The myriad armies of mosquitoes and houseflies transmit malaria, fever, dysentery, tuberculosis, cholera and dozens of other dread diseases.

In the light of all of this evidence against the insect kingdom, what should we do? If it were possible, would it be wise to wipe out all the insects that inhabit the earth in numberless billions?

The answer is that it would be decidedly *unwise*. Supposing insects *do* destroy ten percent of our crops. That is certainly a small enough price when we consider that without the aid of insect pollination we would have practically no crops at all. If we destroyed the insects we would not only lose our crops, but also the wealth produced by insects in the form of honey, beeswax, silk, dyes, etc.

We owe the insects a standing vote of thanks on another important point. And that is for their remarkable job of destroying dead and decaying animal matter, which would otherwise litter the face of the earth, providing a potential source of infection far greater than any the insects might be.

Three flies, due to their rapid multiplication, can devour a dead horse as rapidly as a lion might. And flies are somewhat safer in congested areas than would be a hungry lion.

Insects greatly aid man in the prevention of many diseases, as was proven so dramatically in the last world war. Then, doctors noticed, soldiers who had been lying unattended on the battle field for several days were, as a rule, less contaminated with dangerous infections than those who had spent the time in staff hospitals. The reason was that maggots cleaned away decaying flesh and bone, leaving open wounds to heal, sometimes in an almost miraculous fashion.

Now hospitals keep a number of sterile maggots on hand for treatment in certain types of bone infection. Again there is the use of bee venom for use in treating rheumatism. Take the case of the bee moth which is warred on from one end of the world to the other. Yet physicians are hoping that this insect will eventually point the way to a permanent cure of the worst scourge ever visited on man: tuberculosis. For some reason this bee is immune to the tuberculosis organism, and doctors are optimistically hoping that they will be able discover the secret of its immunity.

If a serum could be perfected through this insect mankind would have finally won its two-thousand-year battle.

All in all insects aren't so bad. Actually the most terrible thing they could do to the human race is simply to disappear.

# RAYHOUSE

The Krickack reached out a cautious paw for the bottle . . .

# IN SPACE

by Duncan Farnsworth

"I QUITE definitely advise you to give up the idea, Mr. Kelvin," the commander at Interplanetary Space Base One told Claude as tactfully as he could. The commander was a short, stocky, grizzled old gentleman who held no delusions about science and the progress of interplanetary unity.

"But you say you already have a man stationed on Asteroid Eighty," Claude Kelvin answered with mild determination. "If he can endure the, ah, dangers and rigors of his post I don't see why I shouldn't be able to do likewise."

The commander looked at the tall, wiry, bespectacled young man standing before his desk. He looked at the delicate, nervous hands of the chap, noted the studious solemnity of his expression. He glanced again at the permit lying on the desk. It was signed by a staggering array of important names. He shrugged and gave up the battle.

"Very well, Mr. Kelvin. There's nothing I can do to prevent your risking your neck. This permit allows you to do that. But I might remind you that you'll be stuck on that God-forsaken little blob of matter in space for two months. Our zone space cruiser puts in there only every ten weeks."

**Claude Kelvin had his own ideas about how the strange Krickacks ought to be treated—all of 'em wrong!**

# RAYHOUSE IN SPACE

by Duncan Farnsworth

The Krickack reached out a cautious paw for the bottle . . .

"I QUITE definitely advise you to give up the idea, Mr. Kelvin," the commander at Interplanetary Space Base One told Claude as tactfully as he could. The commander was a short, stocky, grizzled old gentleman who held no delusions about science and the progress of interplanetary unity.

"But you say you already have a man stationed on Asteroid Eighty," Claude Kelvin answered with mild determination. "If he can endure the, ah, dangers and rigors of his post I don't see why I shouldn't be able to do likewise."

The commander looked at the tall, wiry, bespectacled young man standing before his desk. He looked at the delicate, nervous hands of the chap, noted the studious solemnity of his expression. He glanced again at the permit lying on the desk. It was signed by a staggering array of important names. He shrugged and gave up the battle.

"Very well, Mr. Kelvin. There's nothing I can do to prevent your risking your neck. This permit allows you to do that. But I might remind you that you'll be stuck on that God-forsaken little blob of matter in space for two months. Our zone space cruiser puts in there only every ten weeks."

**Claude Kelvin had his own ideas about how the strange Krickacks ought to be treated--all of 'em wrong!**

"That should be quite satisfactory, Commander. My studies will take all of thirty weeks on Asteroid Eighty."*

"And the man we have stationed there," the commander broke in for one last reminder, "is not the, ah, most gentlemanly sort of fellow, you could desire as a companion in your solitude."

"It pleases me," said Claude Kelvin with obvious pride, "to think that I can get along well with any of my fellow beings. It is no particular trick."

The Commander sighed.

"And please," he begged, "watch yourself with the *krickaks*.** They're a deceitful, treacherous, nasty lot."

"Has your man there found any difficulty with them?" Claude inquired.

Again the commander sighed. "No," he admitted. "But there have been tales. And don't forget, our rayhouse there is well equipped with enough weapons to keep them quiet."

"And what was the name of the rayhouse keeper," persisted Kelvin.

"Interplanetary officer Grimes."

Claude Kelvin took out a small black notebook and entered this fact.

"Thank you, Commander. I'm certain that Officer Grimes and I will hit it off admirably."

The commander watched him leave the office. He shook his head, sighing. "You don't know Grimes," he muttered. "And you've never seen a *krickak!*"

* Asteroid Eighty—One of the Rayhouse Stations in the asteroid belt. Unsettled, savage, and—except for the rayhouse—almost as it was before the first Earthmen decided to use its strategic position as a beam signal outpost for the space lanes of that none-too-well charted area.—Ed.

** Krickaks are the still savage, "uncivilized" inhabitants of a certain desolate outer asteroid belt of which asteroid 80 is a key beam base for the space lanes in that vicinity, Krickaks got their name from the first Earthmen to observe their almost electrically controlled bodies and hear the loud "crick-crackling" that is the vibratory sound that emanates from their strange bodies. —Ed.

THE INTERPLANETARY zone cruiser was two days out on its inspection journey, and its sole passenger, Claude Kelvin, leaned against the enclosed deck railing and explained his presence to a junior officer who paused to pass the time of day.

"I'm working on a fellowship grant," young Kelvin declared. "You see, my studies have been a combination of bio-chemistry and sociology."

"They are?" said the junior officer, unimpressed.

"Yes, that's why my work on this lonely little asteroid outpost is going to be so important," Kelvin went on, warming up. "You see, it's long been a theory of mine that bio-chemistry is the key to complete interplanetary union, so to speak. Ever since the discovery of the interplanetary cosmos, and since man's conquest of it has been completed, there has been constant trouble and misunderstanding among the peoples of the interplanetary systems. Look at all the wars that were fought before we Earthmen finally won our conquest."

The junior officer nodded his head in bored agreement.

"That was due solely to the fact that we didn't *understand* the peoples of other planets," Kelvin said with growing warmth. "We were unable to find useful niches for these peoples in the mode of life we had imposed on them."

The junior officer concealed a yawn.

"And you intend to solve that problem—on the *krickaks?*"

Claude Kelvin nodded eagerly.

"Through bio-chemistry, the very computation of their vastly different physical selves, and a mixture of applied sociology, I will find the key. I know it!"

The junior officer frowned.

"But why pick an asteroid infested with *krickaks?*" he persisted.

Claude Kelvin smiled tolerantly.

"Because," he said, "I have heard that they are the, ah, most unmanagable group of space creatures in this particular asteroid chain."

"You're right about that," agreed the junior officer. He half shook his head and muttered something to himself as he took in the lean, ascetic, studious appearance of the young scientist. Then he touched his hand to the visored peak of his uniform cap.

"Well, good night, Kelvin. My watch is coming up."

Claude Kelvin raised a hand to detain him, while fishing rapidly into his tunic pocket for his small black notebook.

"What did you say your name was?" young Kelvin inquired.

"MacQuales," said the junior officer. "Sub-lieutenant MacQuales is the name."

Claude Kelvin painstakingly entered this in his little black book. Then he smiled.

"Thank you, Officer MacQuales," he said. "Good night."

As Sub-lieutenant MacQuales moved down the enclosed deck to the bridge of the space cruiser, he was still shaking his head and muttering to himself dubiously.

ASTEROID EIGHTY was almost exactly as the commander at the Interplanetary Space Base so graphically described it. It was nothing more than a God-forsaken little blob of matter in space. Being one of the fungus infested variety of asteroids, it seemed to Claude Kelvin, as he watched it growing larger from the deck of the zone space cruiser, as being nothing but a gray, greenish, ugly blob at that. But Kelvin smiled, undaunted.

Five minutes later the atomic motors of the zone space cruiser suddenly stopped throbbing beneath Claude's feet, and the space craft slowed to a complete stop.

Claude was dressed in the space gear that had been given him at the Interplanetary Base, and consequently didn't hear the approach of Sub-lieutenant MacQuales when that young officer came down the deck toward him.

MasQuales was clad in space gear also, and tapping Claude on the shoulder he indicated the communications button on his own radiphone. Claude nodded and switched his on.

"Well," MacQuales said, "are you ready?"

Claude was slightly startled.

"We're not moored on Asteroid Eighty, yet," he protested. "There's plenty of time."

MacQuales made a face that might have been a grin.

"Moored, hell. There's no way of mooring on that damned little jungle. We halt our zone cruiser here, then cover the rest of the distance in the ship's lifeboats."

Claude considered this, it seemed to MacQuales, a little unhappily. Then he shrugged.

"Very well, I'll gather my gear and equipment."

"Got much?" MacQuales asked.

"Oh, lots of it. A lifeboat should suffice, however," the tall young man replied.

"We have supplies to deliver to interplanetary officer Grimes, you know," MacQuales explained. "This trip wasn't made especially for your benefit. However, I suppose we can use an extra lifecraft."

"Thank you," said Claude Kelvin. Then he was off hastily to get his equipment.

THE journey from the zone space cruiser to the squat little rayhouse

on Asteroid Eighty was a bumpy one. Claude Kelvin, in the first of the lifeboats, shepherded his equipment like a cackling mother hen over a brood of chicks. He spent the trip dashing back and forth along the slim craft from the helmsman to his gear, and back again, constantly admonishing that space veteran to take it a little easier, to watch where he was going, and to remember that the Kelvin equipment was delicate stuff.

At length, however, both the lifeboats moored safely at the tiny aluminoid space landing platform that stretched circularly around the squat duralloy rayhouse.

On the platform, waiting eagerly for them, was a space-helmeted figure of surprisingly small stature. His radiphone was tuned to theirs as they stepped from the lifeboats.

"Glad to see yuh," the voice boomed. And Kelvin blinked to think that such a small man could have a voice so deep. "Where's my new bunk mate?"

Sub-lieutenant MacQuales had stepped over beside Claude Kelvin, and the two of them advanced toward the short fellow. "Ahoy, Grimes," MacQuales bellowed cheerfully. "Glad you're still alive."

And interplanetary officer Grimes, face wreathed in a huge grin, stepped up to them, hand extended.

"This is Claude Kelvin," MacQuales said. "Kelvin, officer Grimes. I hope you to hit it off well, for you'll certainly see enough of one another."

Claude extended his hand, looking down on the short, rugged, little Grimes.

"I'm sure we'll get along well," he said. "And I hope I won't be in officer Grimes', ah, hair."

Grimes was as bald as a doorknob. A fact the red-faced Claude Kelvin didn't realize until he'd finished his remark.

"Joker, eh?" Grimes looked up unsmilingly into Claude's face.

MacQuales was spluttering redly, forcing back his giggles.

And then Grimes turned, motioning toward the square, airlock door at the front of the rayhouse.

"Come on," he said. "Join me in a drink before you go, MacQuales."

They followed Grimes up the landing as the space stevedores went on with the unloading behind them. Minutes later they removed their helmets as they stepped out of the final airlock into the comfortable and compact quarters of the rayhouse.

"Well, what do you think of it?" Grimes asked Claude, waving a hand at his quarters.

"Very nice. Very nice indeed," said Claude, "but—"

"But what?" Grimes frowned.

"Will there be any room for me to set up a laboratory?"

"There's a sort of cellar below," Grimes said. "You should have plenty of room there."

BY now the three had climbed from their space gear, and Grimes was rummaging around in a duralloy compartment, bringing out three glasses and a spiraled bottle.

"Venusian stuff," Grimes said, holding the bottle high as he brought it back to a table with the glasses.

"Good," MacQuales observed a few minutes later, smacking his lips and holding out his glass for a refill.

"Damned right it is," Grimes retorted. "If those *krickaks* knew I had this in stock they'd have been raiding the rayhouse every night."

Claude's ear pricked up with sudden interest.

"The *krickaks* like liquor?" he asked.

"Love it," Grimes said, "when they can get it."

MacQuales looked meaningly at Grimes.

"Young Kelvin has an idea that he's going to make the *krickaks* one big happy part of our interplanetary family."

Claude dove head first into the conversation. With breathless enthusiasm he proceeded to tell Grimes exactly how he was going to "socialize" the *krickaks*.

Grimes listened to all this with a straight face. When Claude finally finished he said,

"I think you're going to be a little disappointed, Kelvin. Those *krickaks* are a bad lot. I don't want them within a mile radius of these quarters."

"But my work," Claude began protestingly.

"The work of running this rayhouse is of first importance around here, Kelvin," Grimes snapped. "And anything that might interfere or endanger it is out."

"A one mile radius," Claude said reflectively. Then; "I understand, perfectly, Grimes. But if I wish to go to the *krickaks,* in their own habitat—so to speak—that will be permissible, won't it?"

MacQuales was gazing neutrally at the ceiling.

Grimes poured himself another drink.

"That will be entirely up to you. Your neck is your own. If you want to risk it, it's your own business."

"Thank you," Claude said stiffly.

"But," and Grimes raised a forefinger in warning, "if you should get in trouble out there," he pointed toward the door, "I can tell you now not to expect any help from the rayhouse."

"I understand perfectly," said Claude, and his lips were compressed whitely.

MacQuales suddenly stood up.

"The supplies and Kelvin's equipment should be stored by now," he said. "I'll be running along." He began to climb into his space gear once again. Before putting on his glassicade helmet, he added: "I'll see you two gentlemen in another ten weeks. Goodbye and good luck."

Grimes and Claude watched him enter the first airlock, both silent. Then he was gone. Grimes picked up the bottle of Venusian whisky. He was silent as he refilled his glass.

"The fact that this rayhouse keeps going, the fact that I've never let these lightbeams falter once, has saved thousands of lives of space travellers. I don't intend to let this Rayhouse blink off—even once. So to repeat, you'll have to take care of yourself if you get in trouble out there."

Claude Kelvin stood up stiffly. Forgotten were his theories of getting along with people. He didn't like this stocky, rugged little Grimes, and no amount of reasoning could make him do so.

"I heard you the first time," said Claude. . .

FOR THE NEXT four days relations between Grimes and Claude Kelvin didn't improve. They ate their dinners in silence for the first two days. And after several sharp exchanges, they ate at different intervals after that. In the meantime Claude was acquainting himself with the rayhouse and Asteroid Eighty.

It was with no little surprise that Claude found the rayhouse to contain a complete arsenal of atomic rifles and electro-handbombs. He remembered the commander at the Interplanetary Base having remarked that the rayhouse was safe from the mischief of the *krickaks* because of its supply of weapons, but somehow he hadn't imagined

that such a complete store of killing gadgets would be on hand.

And Claude had seen the great ray turbines which kept the beams of the rayhouse sweeping uninterruptedly out into space. These were of scientific interest to him, but due to Grimes attitude, Claude didn't have much chance to inspect the apparatus as carefully as he'd have liked. Tersely Grimes had explained their operation to him, indicating in no uncertain terms that he didn't want Claude browsing around such important equipment.

But by the third day Claude had his own minor laboratory set up in the cellar of the rayhouse, and found himself engrossed in the first steps of his own work. Grimes didn't bother him in this. In fact the hard-bitten little space officer didn't even bother to inspect Claude's project.

And it was on the fourth day, late in the afternoon, when Claude had finished climbing into his space gear and Grimes came down from the ray towers to prepare his own meal, that the two had their longest conversational interchange since the departure of the space zone cruiser.

"Going some place?" Grimes asked.

"I've decided to have a look at Asteroid Eighty," Claude answered briefly.

"And the *krickaks?*" Grimes persisted.

"And the *krickaks.*"

Grimes didn't answer him immediately. He went over to the small supply chest at the corner of the room, rummaged around for a moment, and returned bearing a brace of atomic pistols.

"Here," Grimes said. "You'd better takes these with you."

Claude's lips went stubbornly flat.

"I don't believe I'm going to do any hunting," he said frigidly.

Grimes hesitated only an instant. Then he shrugged, jaw gone hard.

"Suit yourself," he replied. He hurled the weapons back into the supply chest.

But Claude had a word or two to say.

"Those guns," he declared, "and the arsenal you keep here, are all an indication of just why the *krickaks* have never been friendly."

"That's why they've kept their distance these past ten years," Grimes said evenly.

"If you treat them that way," Claude went on, "you can always expect trouble from them. When this little asteroid chain was first discovered did anyone make any attempts to establish friendly relations with the *krickaks?*"

"They were born to make trouble at every chance. They're as nasty and treacherous as any group of interplanetary natives still existing," Grimes said with even calm. "I took over this post ten years ago, after eight men had died in the space of a decade trying to keep it going. I haven't failed. And I don't intend to."

Claude stepped over to the airlock, opening it. Then he stepped into the chamber. He had a vision of obvious disgust painted on Grime's space-seared features as the door closed. Then he waited for the second airlock to open.

WHEN he stepped out onto the landing platform that encircled the squat bulk of the rayhouse, Claude had dismissed his irritation at Grimes' stupidity from his mind. There were now other and more interesting things to consider.

Such as the thick tangle of green gray jungle that surrounded the platform on every side. A weird scramble of lush and harsh vegetation that was ominously silent.

There was a ladder at the rear of the platform. A ladder that ran down to a path at the fringe of the strange

jungle. Claude moved over to this and deliberately began his descent to the path. He looked up once, as he clambered down the ladder, and caught a glimpse of Grimes—in the ray towers —peering out through the glassicade shell at him. Then Grimes' head disappeared.

Claude smiled quietly to himself. Grimes was like the rest of the old time space officers. He'd been part of the group who discovered this asteroid chain, charted it, fought through it, and more or less "civilized" it. To him the whole thing was a simple matter of force and conflict.

Claude's feet touched the ground, and he released his grip on the ladder. Then he turned and looked around, staring through the tangled underpath that led down into the morass of wild vegetation. He smiled again, a little tightly, and started down that path.

As he walked, his hand found the radiphone button on the front of his space gear and switched it off. Then he opened his vibration panel at his chest. This would permit him to hear any sounds that came through the atmosphere around him.

The tangled underpath grew steeper, and darker, but Claude walked on. Sounds came to him through the vibration panel. Faint scratching sounds, as Claude saw small, curiously colored insects slithering along the surface of great rough leaves.

And then there was a definite crackling coming through the vibratory panel.

An involuntary shiver of excitement ran down his spine. *Krickaks* were somewhere in the vicinity! He'd never seen anything but radifoto pictures of these creatures, but he knew—almost as surely as if he'd heard it before—that their physical mechanisms were marked by the peculiar crackling sounds constantly vibrating from their weird bodies. Their very name *krickaks*—came from the first auditory impression they'd made on Earthmen who'd discovered them.

Claude moved onward. Ten yards more and he stopped. Ahead, up on the summit of the path, was a *krickak!*

The luminous shine to the creature's body made him easily visible in the semi-darkness of the strange surroundings.

He was of standard size, about as tall as the average Earthman. But his body was round, globular, and his head was of the same shape. He had round eyes, almost an inch in diameter each, and they were lidless and staring.

There was no nose to the creature. And for a mouth there was a constantly open oval, perhaps an inch wide and three inches long. Its legs were short and straight, with apparently no joints. And its arms were long and trailing, reaching almost to the ground.

The crackling vibrations grew louder as it regarded Claude. Now Claude moved forward once again, his arms extended wide, space guantlets open, showing that he was unarmed.

Then, less than five yards from the *krickak,* Claude stopped. He fished into the small knapsack pocket on the side of his space suit.

The crackling vibrations grew in intensity, as though in alarm or fury.

Claude brought forth a bottle from Grimes' Venusian stock—and placed it ahead of him on the ground!

The crackling vibrations were now querulous, and after an instant's hesitation the *krickak* moved forward with lightning speed, seized the bottle, and darted back. Claude smiled. Grimes hadn't been lying. The creatures liked this stuff.

Now Claude took a few steps toward the *krickak.* The creature didn't re-

treat, and its vibrations were steady. Claude took a deep breath as he stepped within arm's reach of the *krickak*. He kept smiling. This was working splendidly. Grimes should see him. It would change a few of his asinine notions.

Claude extended his hand, with the notion of placing it on the *krickak's* shoulder. And then, with incredible speed, the creature whirled and bolted off into the underbrush!

Claude stood there gaping foolishly, startled by the abruptness of the *krickak's* departure. Then he shrugged in good humor.

"The first gesture has been made," he said to himself. "And now there's a slight groundwork to start on."

He stood there for perhaps ten minutes longer, listening intently for any sign of the return of the *krickak* or the approach of any others of the strange breed. Then he turned and retraced his steps down the sloping path toward the rayhouse.

GRIMES WAS waiting for Claude when he returned. The grizzled little space officer seemed irritable and anxious about something. He was pacing back and forth in the narrow confines of the living quarters as Claude emerged from the airlock and into the room.

"What'd you find out there?" Grimes snapped.

Claude was startled. Then he was smug.

"I encountered one of the oh-so-dangerous *krickaks,*" he said casually. "In no time at all I had a friendly footing established. The creature fled, of course, but not until I'd convinced him I was harmless."

"I'm surprised your hide is still intact," Grimes snapped. "Because there's something stirring on Asteroid Eighty, Mr. Kelvin. And not space mice!"

Claude essayed his most superior smile.

"Really? You know, Grimes, I believe that you've been living in a world of your own imagination for these past ten years. When I return I'll recommend a vacation for you back in civilization. It might do you some good."

Grimes forced back the words that choked his throat. His jaw was a solid line of muscle. He jerked his thumb as he turned on his heel.

"Come on, Kelvin. I'm sure this will be of interest to you."

Still smiling in smug complacency, Claude followed Grimes up the staircase that led to the ray towers. The two were wordless until they reached the observation platform above the vast turbines that generated the ray beams.

Grimes walked over to an instrument panel at the front of the platform.

"Look at that," he invited, pointing to one large dial on the panel in particular.

Claude bent over, frowning at the dial. He straightened up.

"I'm sorry," he smiled, "but I don't get it."

"You're supposed to be a bit of a bio-chemist," Grimes said sarcastically, "and I imagine you have sense enough to note a wavering instrument needle when you see one."

Claude nodded.

"I'll agree, the instrument needle *is* doing quite a bit of wobbling back and forth. But what's that got to do with bio-chemistry?"

"You've seen a *krickak?*" Grimes asked tersely. "You've heard the crackling vibrations emanating from its body?"

Again Claude nodded.

"Bio-chemistry has proven that the *krickaks* are physiologically 'juiced' by

some electrical current that gives them their life impulse. There's some sort of dynamo in them that's just as important to them as a heart is to us." Grimes stated.

Claude was somewhat taken aback. Grimes seemed to know more than he had given him credit for. He listened as the grizzled little officer went on.

"Well because of that electricity, which is a very real force, the body vibrations of the *krickaks*—when especially active — usually register here in the rayhouse on our instruments. It's not enough to affect our instruments unless they are especially strong in number and unusually excited about something."

Claude found himself looking again at the wavering needle.

"I haven't seen those instruments react as strongly from those devils in a very long time," Grimes said. "Something is afoot, I'll stake my heart on it."

FOR a change, Claude Kelvin didn't know quite what to say. He opened his mouth and closed it, wordlessly.

Grimes was staring at him.

"What did you do when you ran into that *krickak* out there this afternoon?"

Claude gulped.

"I gave him a present, er, a token of good will."

"What was it you gave him?"

"Some whisky—a bottle of it—belonging to you."

Grimes glared in disgust. His fists bunched and he stepped forward slightly.

"See here," Claude said hastily, backing a pace, " I intended to reimburse you for it. I'll pay you this instant if you don't believe me."

"You blundering jackass!" Grimes spat the words. "I never should have let you poke your nose outside the rayhouse. Do you think the price of the stuff meant a damned thing to me?"

"Well, then," Claude said hastily, in an effort to dismiss the affair, "I don't see why you're making such a melodramatic fuss about everything. Surely a little whiskey, just a bott—"

"One bottle of whisky," said Grimes, emphasizing each word with ominous clarity, "is enough to make an entire tribe of *krickaks* crazy drunk for a week. One drop to a *krickak* can cause enough hell for two days' shooting."

"How was I to know—" began Claude.

"I shouldn't have expected you to know anything," Grimes said in disgust. "That was my mistake!"

Again Claude opened his mouth, ready to protest hotly. But Grimes leaped suddenly to the side of the flickering instrument needle on the panel. It was wobbling twice as madly as before.

Grimes' language was not delicate.

"See here—" Claude managed.

"Shut up," Grimes snapped. "Get downstairs and bring up a pair—no four— atomic rifles!"

Something in Grimes' tone made Claude wheel automatically and turn hastily down the spiral of the staircase. When at last he was pounding up the stairs again he had divested himself of the rest of his space gear and was bearing four atomic rifles.

Grimes grabbed two of the rifles from his hand.

"Know how to shoot?" the grizzled little space officer snapped.

Claude nodded mutely. Grimes shoved two of the rifles onto the railing before him. Then he reached out and threw a switch. The entire landing platform outside and beneath the rayhouse was flooded with light. The fringes of the jungle around it were also revealed.

And Claude gasped at what the sudden flood of light revealed. A swarm

of *krickaks* had climbed to the landing platform and were milling about the duralloy sides of the rayhouse. Grimes had been busy pulling forth a pair of space helments and brief garb from under a compartment by the panels. He handed one of these to Claude.

"Climb into that," he snapped, "and we'll roll down the tower turret and get down to some plain and fancy dealing with those *krickaks!*"

Claude suddenly stiffened stubbornly.

"How do you know those poor devils mean any harm?" he demanded.

"They're just out there to thank us for the whisky," Grimes blazed sarcastically. "Do as I say!" he thundered.

Dazed, Claude climbed into the rig Grimes had tossed him. Then Grimes grabbed him by the arm.

"Look at them closely," he ordered. Claude peered down at the *krickaks*. "See those small sticks they carry in their hands?" Grimes demanded.

Claude nodded.

"Those are weapons, and nasty ones at that," Grimes explained. "When one's pointed your way, duck. There're electrical charges in those innocent sticks that completely paralyze a man who's unfortunate enough to be in the way when they hit!"

Claude nodded again, punctuating his emotions with a gulp.

THEN Grimes touched a button and the glassicade turret around their tower swiftly dropped down on all sides. Grimes leaned over the railing, atomic rifle at his shoulder.

Hastily Claude took a post several yards away from Grimes, picking up an atomic rifle and assuming the same pose.

"They haven't seen us yet," Grimes called. "They haven't grown used to the light." And with that he carefully picked out the foremost *krickak* on the landing platform and squeezed the trigger on his atomic rifle.

The *krickak* dropped flat on its round stomach, a shower of sparks splashing from its body like blood. It lay there inertly, its comrades milling around it in surprise.

"They're looking up at us now!" Grimes yelled. He squeezed the trigger on his atomic rifle again. Another *krickak* splashed sparks and rolled off the platform edge into the tangled underbrush of the jungle.

But Claude hadn't moved his rifle from its position at the rail. He was staring popeyed at the two fallen *krickaks*, at the showers of sparks that spewed from their bodies.

Grimes turned his head toward Claude momentarily.

"Dammit," he bellowed. "I thought you could shoot. Let fire!"

A small red ball of electrical fury suddenly zipped past Claude's helmet. Then another, and a third blazed through the chromealloy railing at his elbow.

Claude trained his rifle on a *krickak* almost directly beneath him. The creature was pointing the stick-like object in its hand up at him. Claude squeezed jerkily on the trigger. The *krickak* went over backward like a toy soldier before a cork. Again there was the shower of sparks, and again Claude's jaw hung agape in astonishment.

Grimes was firing with coolness and accuracy. One by one he picked off the leaders of the group on the platform. His atomic rifle was glowing at the duralloy barrel point, so he put it down and picked up his spare.

Another shot. Another shower of sparks.

The small blazing electrical pellets were smashing all around them now, and Claude was firing with mechanical

accuracy that surprised him. And as each *krickak* fell backward, sparks showered forth and Claude shook his head unbelievingly.

Then finally, Claude was aware that the platform was bare of *krickaks*—living *krickaks*, that is—and that Grimes had stopped firing. Claude could see other *krickaks* poking their round heads out of the underbrush spasmodically, while their comrades who were able to leave the platform alive retreated in confusion.

Grimes found the button that brought the glassicade tower turret up around them once again, and was pulling off his helmet a moment after it closed. Claude followed suit, and when he'd climbed out of the rest of his gear Grimes was gazing down at the *krickak*-strewn landing platform with grim satisfaction.

"Not bad for a lesson to them," he said.

CLAUDE was a little sick. They were, after all, living, thinking creatures, even though their bodies were hardly human. He nodded white-faced.

"Do you think they'll be back?" Claude asked.

Grimes nodded positively.

"Of course. This is just the first of a series of attacks. The light will keep them frightened off for a bit. That'll give you a chance to catch a few winks below."

Claude hesitated.

"Look," he blurted finally, "if I was in any way responsible for this, I'm sorry."

Grimes looked at him expressionlessly.

"Skip it," he said. "That can be ironed out later. Right now there's a job to be done. We've the rayhouse to protect, and we can't expect any help from the zone cruiser, since it won't be back for another six days yet."

"Surely they can't do anything against weapons such as these—" Claude began.

"They're tricky devils," Grimes said noncomittally. "You never know what to expect. There's an interspecial liner—one of the biggest passenger crates in this chain—due past here in another two days. We'll have to keep the beams going until then, or there'll be hell loose for better than a thousand of our Earth pals."

"But—" Claude began, aghast.

"Isn't that a noble enough reason for staying alive two days?" Grimes asked sarcastically. "We've got to keep the rayhouse going. Get below and grab some shut eye!"

Claude Kelvin, considerably shaken, started toward the spiral staircase. He paused before stepping down.

"Those sparks," he said. "There'd be a shower of them, like blood, every time we got one of the *krickaks*. Why?"

Grimes shrugged in annoyance.

"Never stopped to figure it out. The hooch you gave them is responsible, I'm reasonably sure. When you plug 'em when they aren't crazy drunk, nothing but a bluish liquid oozes out."

"But why—" Claude began.

"What a hell of a thing to be worried about at a time like this!" Grimes snapped in sudden vexation. "Get below!"

Claude got below.

IT WAS SOMETIME in the early morning when Claude Kelvin, sleepy eyed and frightened, scrambled up the spiral staircase to the ray towers where a weary Grimes still stood watch.

"I'm sorry if I took too much sleep," Claude began.

"Skip it," Grimes growled. He

handed Claude the atomic rifle he'd been resting against the platform railing. "If anything comes up, wake me. Don't try to handle it yourself."

He disappeared down the spiral staircase.

Claude peered down into the dense foliage that surrounded the landing platform at the bottom of the towers. There, somewhere in the darkened thickness of the weird jungle, were the *krickaks* he had intended to use for study.

He noticed that the bodies of the roundly formed creatures who'd been slain on the platform the night before were still there, exactly as they'd fallen. Then he turned his attention once more to the tangled gray-screen morass of strange jungle.

The minutes crawled by. The hours oozed along. A cramp came into Claude's back, and a sweat of strain and anxiety clouded his spectacles. He stretched, took a firmer grip on the atomic rifle. Grimes had said that the space liner would be passing in two days.

That would mean some time tomorrow. They would have to hold out untill tomorrow. And suddenly Claude was aware of the resignation of his thoughts. Until tomorrow. And after that, supposing the *krickaks* got them?

Claude Kelvin shuddered. Up until this very moment in his young life the thought of death had been but contemplation in a science laboratory. He had studied death in relation to other people. Never to himself .

It wasn't pleasant. Claude took off his spectacles with one hand and wiped them carefully on his tunic. Then he placed them back on his lean, ascetic nose and resumed his contemplation of the jungle foliage.

He looked over his shoulder for an instant. The needle on the big dial of the instrument panel was flickering with the same intensity as it had the day before. He shuddered, thinking of those pop-eyed *krickaks* lurking out there, watching him. He wondered how he had escaped death when he'd ventured out there.

Suddenly Claude felt a sense of guilt assail him. Here he was wrapped up in consideration of the salvage of his own hide when the lives of thousands were at stake. For he knew, even though Grimes hadn't said so in so many words, that the stopping of the rayhouse beams would hurl the luxury space liner into an unnavigable morass of small, interwoven asteroid belts. The liner would undoubtedly crash on one of these webs without the guidance of the ray beams.

Claude saw a round, globular body appear against the gray green thickets on his right. He turned swiftly and squeezed the trigger of the atomic rifle. The figure disappeared. Claude was unable to tell if he'd made a hit or not.

Another hour crept by, and then another. Claude was finding it difficult to keep the haze from his spectacles. They reflected too much light. Far too much light. It made everything seem hazy, dim, dim.

CLAUDE came awake with a start. It might have been due to the loud crackling vibrations that seemed to be everywhere around him. Or it might have been due to the *splat, splat, splat* of an atomic rifle firing rapidly somewhere on the spiral staircase.

Darkness was setting in, and Claude realized even as his eyes blinked open that he'd been guilty of horrible weakness. He'd fallen asleep on watch!

He lurched erect, grabbing his atomic rifle and rushing to the staircase. It was clear to him now that that was where the noise of the rifle and the

crackling vibrations of *krickaks* came from.

The *krickaks* had stormed the rayhouse as he slept—and somehow they had gained entrance!

Claude was at the staircase, now, and he looked down to see Grimes, his tunic streaked with sweat, backing up the stairs while blazing away at a swarm of *krickaks* who were trying to follow him!

He had only one emotion, a vast overpowering sense of relief at the realization that his negligence hadn't cost Grimes his life. Then Claude hurled himself recklessly down the steps until he stood shoulder-to-shoulder with Grimes, blazing away at the hideous round, open-eyed faces that pressed up at them.

The two worked their way back up the staircase, step by step, rifles growing hot in their hands. Occasionally electrical pellets of fire swept around them as the *krickaks* fought back.

Grimes looked at Claude once, and the contempt that was in his glance was withering.

And finally they had gained the towers, and Grimes was pulling a thick, duralloy hatch cover over the staircase, clamping down bolts on all sides of it, while the *krickaks* milled around in crackling angry frustration on the other side.

Grimes stood back, then, and Claude saw that the grizzled space officer's right shoulder was seared gruesomely, sickeningly, almost to the bone.

"They hit you!" Claude exclaimed.

Grimes snarled his reply.

"While *both* of us were asleep!"

The crackling below the hatch cover over the staircase was receding. The *krickaks* were evidently going down to the living quarters of the rayhouse to reconnoiter.

Grimes was whitefaced, and his eyes were fever glazed. Claude watched in horror as the veteran space fighter slumped sickly to the platform. Then, suddenly, something was strangely, ominously silent.

Grimes looked up at Claude, his teeth biting down the anguish of his wound.

"That sudden silence is the stopping of the ray turbines by our friends the *krickaks,*" he said bitterly. "The beams have stopped." His speech was labored, thickening.

Claude stood there, wordless, filled with burning shame and self-accusation.

"The beams *can't* stop!" Grimes muttered thickly. "The liner'll probably be passing tonight. Gotta have beams —gotta!" He made a futitle attempt to climb to his knees. This failed and he tried to drag himself toward the hatch cover. "Start the beams myself," he muttered, "*have* to start 'em!"

And then interplanetary officer Grimes lost consciouness, and sprawled face downward on the platform of the towers. Claude was sobbing blindly in shame and rage as he bent over the inert figure.

HE DRAGGED Grimes' body over to a comparatively safe corner of the platform, then, still carrying his atomic rifle, he rummaged through one of the compartments beneath the instrument panels until he found what he sought.

When he walked over to the hatch that covered the spiral staircase he had a haversack of metacloth slung over his neck. In the haversack were two dozen elecro-hand bombs. Then, deliberately, Claude set to work unfastening the bolts Grimes had thrown over the hatch. Moments later and he was prying the hatch off the opening.

Claude Kelvin marched down the spiral staircase unmolested. The *kric-*

*kaks* were gathered in the living quarters. He could hear the wild confusion of crackling that went on down there, and the smashing of furniture and the breaking of bottles. They were probably having a hell of a time on Grimes' Venusian whisky.

Passing the level on which the ray turbines were stationed, Claude saw sickly that they had been utterly smashed by the *krickaks*. He had feared, yet expected that. The crackling grew louder. He was but a few yards from the living quarters. The first *krickak* appeared at the bottom of the stairs, just three steps away.

Claude fired the atomic rifle from his hip, straight into the *krickak's* face. There was a shower of sparks. Then other round heads appeared at the doorway. Claude fired rapidly, efficiently, his mind a blaze of fury. The faces showered sparks, fell back.

Claude stepped into the living quarters. He hurled his first electro-handbomb at a group of some fifteen *krickaks* milling about in the far corner of the room. The explosion was terrific. Somehow the walls withstood it. Claude was hurled to the floor by the force of the shock. Then he was crawling to his feet, rifle still at his hip, firing again and again at the now terrified creatures. Sparks showered everywhere.

Those who could were swarming toward the airlocks through which they entered. The jam there gave Claude time to pick off each *krickak* like a clay duck. None got out.

And in the smoke and sparks and horrible confusion, Claude Kelvin, no longer an ascetic young man, looked eagerly about the room for another *krickak* to kill. There were none.

Claude dropped his rifle, his electro-handbombs. He grabbed the thin tendril-like arms of four of the creatures and dragged their inert bodies up the spiral staircase.

He dropped them on the landing where the useless ray turbines stood. Then, with the grim unseeing stare of a man under hypnosis, he went to work. His brain was bare of all but one thought. The beams had to be there for the liner.

SUB-LIEUTENANT MacQUALES was naturally dumbfounded when he arrived at the rayhouse on Asteroid Eighty some four days later. The place was a scene of incredible confusion and chaos. And young Claude Kelvin, tattered, smoke-streaked, and delirious from overwork and hunger, was incoherently unable to explain much.

But the rayhouse was operating. Its beams were flashing with consistent and surprising strength. And officer Grimes, with a wound that could only have been inflicted by a *krickak*, was also beyond anything but delirious babbling.

There was also an extremely peculiar odor about, and absolutely no *krickaks* except the two found beside the ray turbines. The odor was of burning electrical matter—almost fleshy—and Venusian whisky.

It wasn't until later that young Claude Kelvin explained that the electrically powered bodies of the *krickaks* —soaked in whisky—had provided excellent, sparking, dynamos to replace the turbines they'd destroyed, and had kept the ray beams sweeping forth from the towers and out into the space lanes.

As officer Grimes put it, after he and Claude had buried the hatchet at his bedside,

"The kid knew nothing at all about sociology, but boy what a whiz at biochemistry!"*

DON'T MISS THE JANUARY ISSUE IT'S BIG

# TERRIBLE TREES

## By ARTHUR MAHON WOODSTOCK, Ph.D.

### You love to wander about in the forest, eh? Well, maybe you'll change your mind now . . .

IT IS part of American belief that trees are noble, beautiful creations of God, designed to grace this terrestrial sphere with magnificent grandeur and friendly shade. In the case of the lordly oak and the stately pine this conception is borne out; but in the case of numerous other trees it has scant application. For in various corners of the world exist aboreal perverts that neither beautify the terrain nor lend soothing shade to weary travelers. In fact they are dangerous, and in some cases actually fatal, to human beings.

Take for instance the "evel" tree peculiar to the semitropical regions of Mexico. Known as *Arbol de la Mala Mujer* (Tree of the Bad Woman) it is found chiefly in isolated, barren spots. The appearance of the tree is like something from Dante's *Inferno*. Twisted and blackened limbs spring from a stunted, contorted stump like the waving arms of Death. It supports no foliage, casts only a travesty of cool shade—and its touch it deadly.

The trees are labeled dangerous by the government, but occasionally an unwary tourist will make the mistake of touching one. The results are horrible. The tree secretes a virulent poison that has, in a number of cases, proved fatal. But if the victim doesn't die he is left with skin disease, fever, other ills from which he is unlikely to ever recover completely.

Another vicious tree is the "dynamite tree." Fortunately there is only one of this rare species in existence today. It grows in the yard of a native home in Cuernavaca, where it is given a wide berth by members of the family. The government has a prominent sign displayed on this tree to prevent tourists from venturing too close to it.

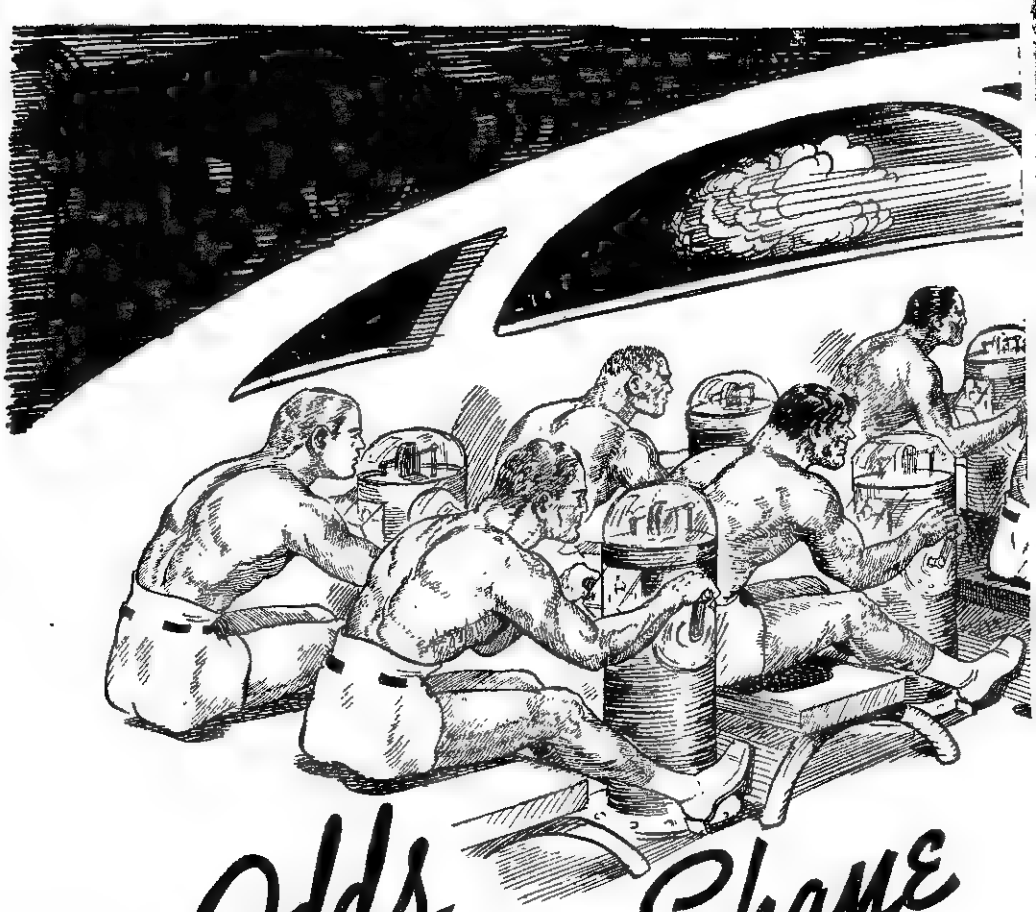
For the "dynamite tree" produces a gourd about the size of a large melon and these have the frightening habit of exploding suddenly and violently when ripe. The blast can be heard for hundreds of feet, and anyone within range of the scattering fragments may be badly scarred. If the forests of France were composed of this species, the Germans would have received the shock of their life when they pushed through them.

Carnivorous trees peculiar to Africa have been known to wrap their fatal tentacles about animals as large as deer and zebra and crush the life from them.

So considering the many vicious trees which exist from one corner of the world to the other, it is easier to understand the superstition of the woodsmen in the German and Austrian forests, who secretly ask the forgiveness of a tree before they chop it down. And the Dutch Sumatrans who placate the unfriendly spirits that lodge in the trees they have been ordered to cut down, by apologizing and explaining to the tree:

"Spirit who lodgest in this tree, take it not ill that I cut down thy dwelling, for it is done at no wish of mine, but at the order of the Controller."

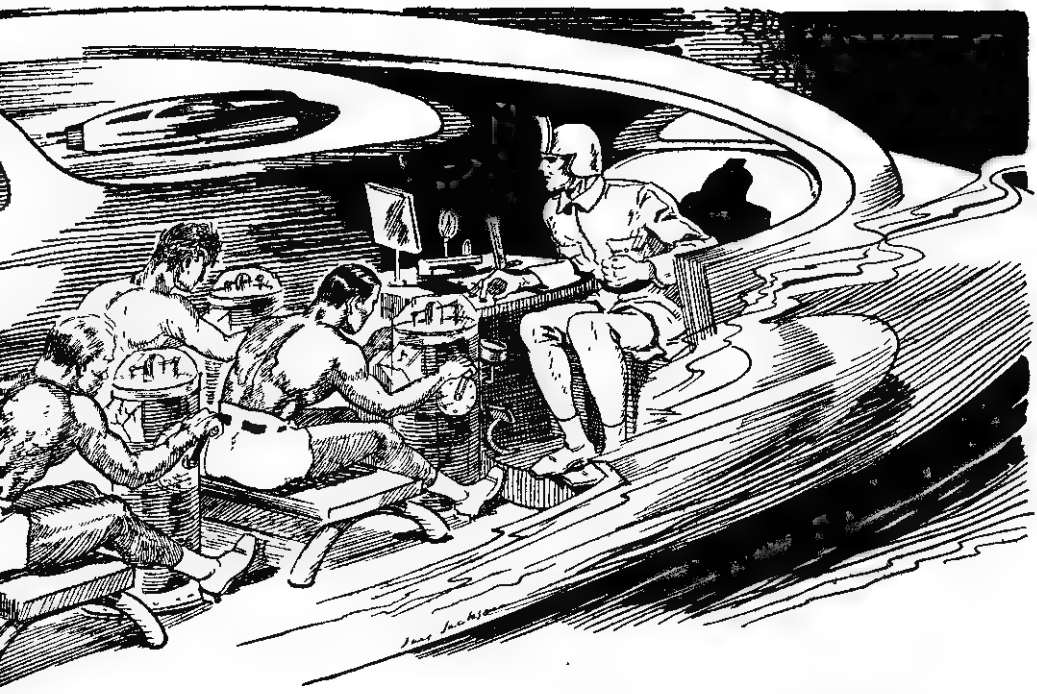
They're taking no chances and we don't blame them.



# The Odds on Sergeant Shane

by JOHN YORK CABOT

**Sergeant Shane had the lifecraft race fixed. He loaded one ship with magnetic mineral. All he had to do was to win the toss for position with a two-headed coin. Then the goof picked tails . . !**



The *Saturn's* lifecraft shot into the lead right from the start . . .

"THE Fleet's in!" said Sergeant Shane of the Space Marines, punctuating his remark by practically knocking me out of my most comfortable dozing position in my bunk.

I blinked at him, regarding his homely red mug and his squat, powerful, ape-like physique distastefully.

"I am very tired. Go away and don't bother me," I answered. "I don't give a damn if every last tub in space is in. I have a bad hangover to combat."

Sergeant Shane playfully tweaked my ear, almost tearing it from my head.

"Now Corporal Cork," he admonished cheerfully, "don't you realize what I'm trying to tell you?"

"If you spoke anything but garbled pidgin Venusian I might be able to understand," I answered, giving up my effort to catch forty winks.

"When the Fleet comes in," Shane went cheerfully on, "it means that the F.S.S. *Saturn,* our rival, is also in."

"I am amazed at your remarkable deduction," I declared, sitting up on the edge of my bunk.

"And that," said Sergeant Shane, "means that the honor of the F.S.S. *Western Hemisphere* is at stake."

"If you are thinking of brawling in Martian night spots with the marines and tars from the *Saturn* you'd better give up the idea," I said. "You know what the Fleet Commander's orders are on that. If there's any inter-ship brawling the entire Fleet will be deprived of liberty tickets for the duration of our stop here."

Sergeant Shane made a *tsking* noise with his tongue against his wolf teeth.

"Corporal Cork," he said, "you wrong me dreadfully. I haven't been in a brawl since—"

"Since our last stopover," I cut in.

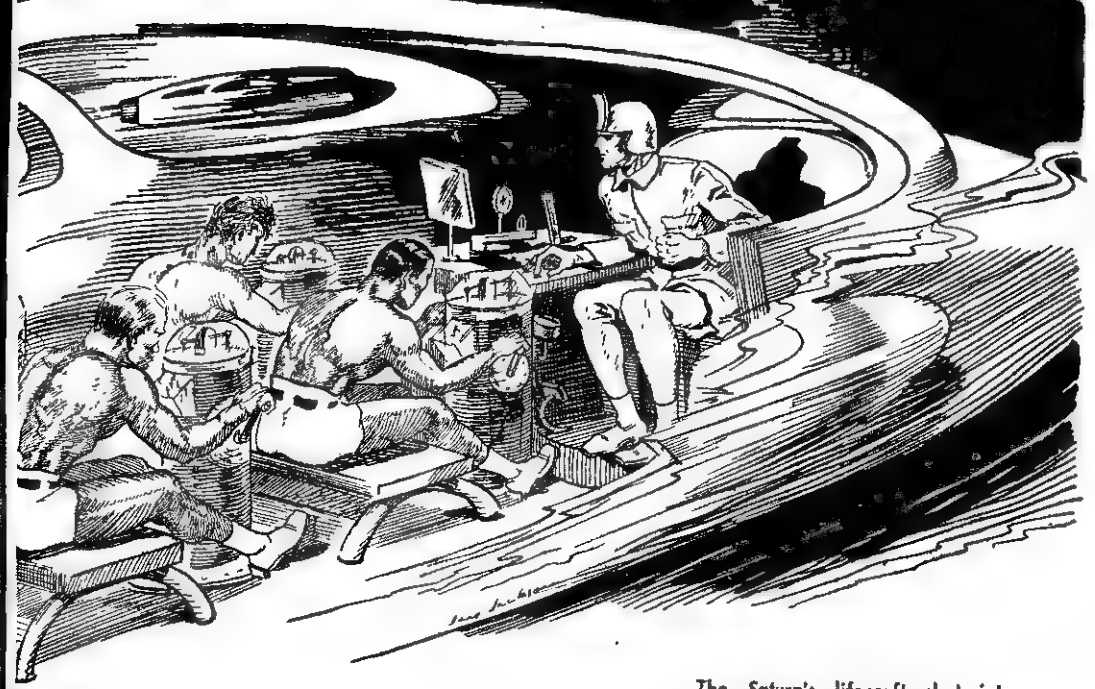
"Well anyway," Shane said rapidly,

# The Odds on Sergeant Shane

## by JOHN YORK CABOT

**Sergeant Shane had the lifecraft race fixed. He loaded one ship with magnetic mineral. All he had to do was to win the toss for position with a two-headed coin. Then the goof picked tails . . !**





The *Saturn's* lifecraft shot into the lead right from the start . . .

"THE Fleet's in!" said Sergeant Shane of the Space Marines, punctuating his remark by practically knocking me out of my most comfortable dozing position in my bunk.

I blinked at him, regarding his homely red mug and his squat, powerful, ape-like physique distastefully.

"I am very tired. Go away and don't bother me," I answered. "I don't give a damn if every last tub in space is in. I have a bad hangover to combat."

Sergeant Shane playfully tweaked my ear, almost tearing it from my head.

"Now Corporal Cork," he admonished cheerfully, "don't you realize what I'm trying to tell you?"

"If you spoke anything but garbled pidgin Venusian I might be able to understand," I answered, giving up my effort to catch forty winks.

"When the Fleet comes in," Shane went cheerfully on, "it means that the F.S.S. *Saturn,* our rival, is also in."

"I am amazed at your remarkable deduction," I declared, sitting up on the edge of my bunk.

"And that," said Sergeant Shane, "means that the honor of the F.S.S. *Western Hemisphere* is at stake."

"If you are thinking of brawling in Martian night spots with the marines and tars from the *Saturn* you'd better give up the idea," I said. "You know what the Fleet Commander's orders are on that. If there's any inter-ship brawling the entire Fleet will be deprived of liberty tickets for the duration of our stop here."

Sergeant Shane made a *tsking* noise with his tongue against his wolf teeth.

"Corporal Cork," he said, "you wrong me dreadfully. I haven't been in a brawl since—"

"Since our last stopover," I cut in.

"Well anyway," Shane said rapidly,

"I'm not thinking of slugging those space bums from the *Saturn.* I'm just trying to tell you that the Fleet Commander has announced a lifecraft race between the two prize crews of the Fleet."

That woke me.

"What?"

"Exactly," said Shane. "He probably figures that it's the best way to keep peace aland for the duration of the fleet meeting. Give the men on the various space craft something else to think about besides slugging each other."

I whistled.

"That's really something. The two prize crews are the bunch from the *Saturn,* and our own crew from the *Western Hemisphere!* Doesn't the Fleet Commander realize the boys from the *Saturn* and the *Western Hemisphere* don't get along well?"

Shane nodded.

"Sure he does. I overheard one of out officers saying that the Fleet Commander figures it's the best way for the two ships to settle the bad blood between them."

"How ducky," I said. "A lifecraft race. No matter who wins or loses, there'll still be bad blood. Personally I'd sooner spit on a marine or tar from the *Saturn* than speak to him. And a lifecraft race won't change that opinion."

"Sure," Shane nodded cheerfully. "So would I. But that's not the point. The lifecraft race will mean a pool, with plenty of money lying around for the taking."

I nodded.

"Yeah, but—"

"I've already gotten permission from our dear admiral, Old Ironpants, to supervise the betting between the men of the *Western Hemisphere* and the *Saturn.*"

"You're going to handle the bets for our bunch on the *Western Hemisphere?*"

Shane nodded, licking his lips.

"And I'm also to be in charge of our lifecraft crew."

"What's in it for you?" I asked suspiciously.

"Prestige," he said blandly, "and the honor of the dear old *Western Hemisphere.*"

I shook my head sadly. He'd certainly picked up an unthankful job for himself. But that was Shane. Anything to hug the spotlight.

"I don't envy you," I said. "That involves a lot of work and a lot of bookkeeping.' '

"Not so much," Shane said with suspicious nonchalance.

"Not so much!" I grunted. "Why, for one man to handle all that work and nurse a prize lifecraft crew as well is alm—"

"You're detailed to assist me," Shane said, smirking. "So there will be two of us to share the, ah, prestige."

"Why, you towheaded son of a space —" I began.

Sergeant Shane shook a finger in my face.

"Tut, tut, Corporal. No profanity, please!" And with that he turned and rolled happily out of the cabin barracks.

I HAD occasion to use plenty of profanity in Shane's direction during the next four days. For when I'd said he'd have tons of laborious detail work on his hands in taking care of the ship's bets, I was guilty only of understatement. The money that was being wagered was astonishing, even figuring that the *Saturn* carried two thousand space sailors and marines aboard and the *Western Hemisphere* carried eighteen hundred.

I might as well have torn up my lib-

erty ticket for all the good it did me. I was kept aboard the *Western Hemisphere* all this time, cooped up in a dingy cabin writing names and amounts in books and calculating various odds wagered.

But Sergeant Shane didn't lose any spaceburn, no, not that louse. He was making sure that he kept very busy supervising the workouts of our prize crew in lifecraft practice. He was never around when there was work to be done.

And when I did see him he evaded any mention of the mess I was handling, *his* mess, and confined himself to babbling enthusiastically about our lifecraft crew and what a snap they were going to have beating the boys from the *Saturn*.

"Why, our front man, MacKeltish, could man a space lifecraft by himself and beat them bums from the *Saturn*," Shane boasted.

That was true. The big MacKeltish, a sailor from one of the *Western Hemisphere's* atomic cannon turrets, was as powerful as any man in the Fleet. All of us on the *Western Hemisphere* were very proud of the prize ape in our prize crew.

"And I'm seeing to it that MacKeltish gets personal care until the race," Shane went on. "I got him under my wing, so's nothing can happen to him. I had him relieved from duty in the atomic cannon turrets temporarily until the race is over."

And that showed the fever pitch to which this lifecraft race was taking the whole Fleet. When our admiral, Old Ironpants, would release MacKeltish from duty to get in shape for the race, that was really something.

"Them space bums from the *Saturn* have a good crew," Shane admitted grudgingly. "But they can never hope to whip us while we got MacKeltish as front man."

And so it went for the next two days, and finally the much discussed lifecraft contest was just two days away. That was when Sergeant Shane gave me the greatest shock of all.

He came into the dingy cabin while I was bent over the books, making more entries for inter-Fleet betting on the race. Wow, how they were piling up!

I should have known from the smug expression on Shane's pan that something was up. But I didn't.

"How are the bets coming in, Corporal?" he asked. "And how are the odds?"

"The odds are two to one in favor of our crew from the *Western Hemisphere*," I told him coldly. "Thanks to the fact that you've been shooting off your big mouth about what a steal our crew will have."

Shane just smirked wider.

"They should be ten to one," he smiled confidingly. "We're robbing them at those odds."

I went back to my work. He still stood around. And then he let loose with the bombshell.

What's the biggest bet you've registered all day?" he asked.

"Officers or men?" I retorted unsuspecting.

"Men," he said. "What's the biggest."

"Two sailors from our ship," I said. "They're named Jeems and Hoban." I looked down the register. "They placed, ah, one-thousand bucks, Venusian, to be covered at two-to-one."

"Smart guys," said Shane.

"They're crazy," I said. "I've got one ticket, and I'd never take another at these odds."

"You and me," Shane said calmly, "just bought the tickets—a thousand bucks, Venusian—from Jeems and Hoban."

"What?" I bellowed, glaring wildly

at him.

Shane nodded.

"That joint account we had in the Martian Bank here, you know, the one we've been saving toward retirement and the freight space business, I drew it all out."

I stood up, so mad I was shaking. That was a year's pay for both of us. That meant a chance to set up a space freighting concern when our musters were over. We'd been four years saving that dough. And here this hairy-eared idiot had gambled every last cent of it on the race!

"Dont' worry, Cork," Shane said soothingly. "We're a cinch. Have you ever known your old buddy to do anything foolish?"

"Have I ever known," I grated, "that you've done anything sane or sensible!"

Sergeant Shane got out before I could calm down enough to regain control of my muscles. I was hotter than an asteroid firebelt. I was blazing. All our dough, on a lifecraft race!

I suddenly felt very sick at my stomach.

THE next day was the day before the race. And I had a hangover. Shane's wild splurge with our capital had been too much for me, and I'd gone aland to mingle with the Martian citizenry in the lowest dives I could find. Alone and morose, I'd gotten myself thoroughly pickled. Two sailors brought me back to the ship and smuggled my alcoholic form into the safety of my bunk.

Consequently my spirits were more than drooping as I stood against the rail of our big space battle wagon, F.S.S. *Western Hemisphere,* and sopped up the sun.

I hadn't seen Shane since the previous afternoon when he'd made the bombshell announcement about betting our swag. And inquiries around the ship seemed to indicate no one else had seen him.

For as far as anyone knew, he'd gone aland last night also, with MacKeltish as his companion.

I went down to Shane's bunk. He wasn't there. I was anxious to see him, for I'd decided to give him a chance to transfer my half of our huge bet to someone else. I was getting out of it before it was too late.

Thinking that he might be giving MacKeltish a pep talk, I worked my way around to that part of the ship and finally found that hero's hammock. MacKeltish wasn't around either.

I finally gave it up, and went back to the dingy cubby hole where my betting ledger needed attention. I wasn't seated at the desk ten minutes when the duralloy door opened. I looked up over my shoulder.

Our dear admiral, Old Ironpants, stood there in the doorway!

Almost knocking the desk over. I leaped to my feet and snapped into the space salute. His space weathered hatchet face was wreathed in a resemblance to a smile.

"At ease, Corporal," he said.

I relaxed, a little.

"I'm placing a wager, Corporal, against Commander Kerrick of the *Saturn.* I wish you'd enter it in, ah, your log. Five thousand, Venusian, and I'm giving Commander Kerrick four-to-one odds."

"Five thousand," I repeated. And then I couldn't help the squealing rise in my voice. "At four to one?"

Old Ironpants nodded.

"I discussed our crew's chances with Sergeant Shane yesterday afternoon. He seemed remarkably pleased, especially with the ability of Gunner MacKeltish. He was positive that our ship's prize crew would emerge victorious. He

even said that the prevailing odds of two to one in our favor were a steal for us." The admiral coughed. "Ah, naturally, under those circumstances I believed it only sporting to play fair with Commander Kerrick, consequently I doubled the odds for our stake and made it four-to-one. Only sporting. Decency demanded it."

I could only gulp.

Then Old Ironpants was moving out. I came to another brisk salute. When he was gone I sat down weakly in my chair. This was too much. Shane had gone too far. He'd not only talked the admiral into risking all that dough on the outcome, but he'd left the old sourpuss feeling that any odds less than four-to-one in our favor would be absolute cheating!

This was heading for a mess of trouble. Old Ironpants wasn't of the school that lost gracefully. He was strictly die-hard. A loss by our crew would mean more than prestige, it would mean cash, and quite a bit of it. Admirals make a surprisingly modest sum, and five thousand was no small item to Mrs. Ironpants back on Earth.

I thought of that sawed off little ape, Shane, blissfully sitting over the whole damned powder keg.

"Brother," I said aloud, "you've got me, the admiral, yourself and the whole dawgone eighteen hundred men on this battle wagon right out on a nice shaky limb."

But I didn't know the half of it.

DARKNESS had fallen over the Martian space port, and I was snugly, though gloomily, entrenched in my bunk when a space sailor orderly named Barnes came up to me, excited and awfully secretive.

"You gotta step up on deck, Corporal," he whispered. "It's important."

"Is it about the race?" I said disgustedly.

He shook his head in a combination that could mean yes or no.

"It's about Sergeant Shane," he hissed, looking around to make sure no one could hear him.

Against my better judgment, I piled out of my bunk. I went to the deck with him. There he took me off against a deserted bulkhead and spilled the beans.

"A couple of the boys from our ship picked up Sergeant Shane in a back alley to a Martian dive. They've got him on shore, but they don't dare bring him aboard until you've talked sense into him. They think he's been drinking."

A very nasty thought was plucking at the back of my mind. It was almost a premonition.

"Okay," I grated, "I'll go along."

We slipped unobtrusively through the space harbor in a small life cruiser some minutes later. The great gray hulks of the Fleet battle wagons dropped past us every few minutes, and then we were heading down to the space landing docks of the Martian port, passing an array of tramps and freighters and commercial vessels of all types and descriptions. The sight of the freighters made me a little sick.

Finally we moored into the landing platforms and were climbing out onto the docks.

Three sailors whom I recognized as from the *Western Hemisphere* met us as we tied up. Outlined in the murky darkness behind them were two others, holding a groggy Sergeant Shane erect.

"Here he is, Corporal," one of them said, pushing Shane toward me. Shane half stumbled to where I stood.

"Corky," he grunted thickly, "these damned fools think I'm drunk."

I never saw quite such a mess. Shane's head was cut and his uniform

tunic was muddy and torn. There were puffs around the corners of his eyes that looked like the beginning of nice black circles. But I knew in an instant that he wasn't drunk. He was groggy, and he'd taken a terrific beating in a brawl.

Motioning the sailors to get aside, I grabbed Shane by the arm and steered him down the platform a ways. When we were out of earshot I snapped,

"Okay, tough nut. What happened?"

He shook his head, as if to clear the fog. I reached into my tunic pocket and pulled out a small vial.

"Sniff this," I ordered.

He did, and backed away coughing and choking. But his head was clearer.

"There was a fight," he said. "MacKeltish and I were grabbed by six sailors from the *Saturn* as we left the saloon. I was helping MacKeltish ease up on his training so he'd be fit tomorrow and not on too fine an edge."

"Go ahead," I said grimly.

"There were more space bums from the *Saturn*. Mac and I held 'em off as long as we could. But we were outnumbered. I came-to here on the landing platform about ten minutes ago."

But I had ceased to feel concern for Sergeant Shane.

"And where is MacKeltish?" I demanded, fearing his answer.

My erstwhile buddy and stupid companion groaned his grief-stricken reply.

"I dunno. They've probably got him cooped up somewhere until the race is over tomorrow!"

AND then, in no uncertain terms, I told Sergeant Shane a few things. I told him about Ironpants. I reminded him of the money of our own that hung on the outcome of the race tomorrow. I reminded him of the very indignant eighteen hundred men and officers of the *Western Hemisphere* who'd bet their shirts on the strong back of MacKeltish and the prize crew. And I topped it off with a somewhat profane description of his thinking powers.

But Sergeant Shane could only groan.

"Go ahead, Cork," he said hoarsely. "I deserve every word of it."

I took him back to the sailors and we all climbed into the little life cruiser.

"He's all right," I said. "Let's get going." I didn't tell them that MacKeltish had been with Shane, and that said same MacKeltish wasn't due back aboard the *Western Hemisphere* until the race was over tomorrow. They'd know that soon enough.

I sat in the stern of the little life cruiser as we made our way back out to the space harbor. We were slipping past the tramps and space freighters again, and Shane sat wordlessly beside me.

Sarcastically, I muttered,

"What are you thinking, bright boy?"

He raised his head from his paws in despair.

"Of some way out of this," he groaned. "There's gotta be a way out."

I gave vent to a bitter, sardonic laugh. Off our port beam was the gray hulk of a dirty old space freighter just slipping into mooring. We seemed to be sliding toward it a little too close for comfort. I raised my head.

"Watch that freighter on the port beam," I shouted to the space sailor at the controls. "She's not moored yet."

The fellow at the controls gave the atomic motor a little more power, and we stopped sliding toward the other vessel and got back on the right route.

"That's funny, Corporal," he remarked conversationally. "There seemed to be a pull toward that old space scow."

I glanced out at the old tub, and by peering intently was able to make

out the cargo markings on her beam.*

"No wonder," I said. "She's carrying *plagterium*** in her hold. That's pull enough to swerve any little craft like this."

And an instant after I closed my mouth, Sergeant Shane was on his feet beside me. He seemed suddenly to have gone crazy with excitement.

"Stop everything. Stop this life cruiser!" he shouted. Then to me: "I've got it. I've got it!"

The space tar at the controls cut off our power, and looked back at Shane over his shoulder bewilderedly. I was wondering if some blow on the bean outside that Martian saloon had been too much for my chum.

"Listen!" Shane insisted, and then he was talking a mile a minute and waving his hands to punctuate his words. When, in a little less than five minutes, he concluded breathlessly, he asked us, "What about it? Are you all game?"

I just sat back jaw agape. It was a chance. A long one and a wild one. But it was better than none at all. The sailors, who were suddenly aware—from Shane's words—what had happened to MacKeltish, and what would happen to our chances in the race without him, weren't long in making up their minds to act on the scheme.

"Good," said Shane. "Now put over to that freighter. We've got a lot to do." I was only able to shake my head in bewilderment at the audacity of the scheme. But it was typical of Shane that he was now on top of the universe.

SHANE, myself, and the six sailors who'd been with us all through that night should have been tossed in the brig the next morning when we returned aboard the F.S.S. *Western Hemisphere.*

The military police detail took us right to the stateroom of Old Ironpants himself, who was in a frothing rage.

"Sergeant Shane," he demanded, "what is the meaning of all this?"

Shane had coached us all to silence. So in spite of my better judgment he spieled for the group.

"Admiral, our A.W.O.L. was in the line of duty, sir. It concerned the honor of the ship and fair-play in the Fleet." And then, graphically, he went into a lurid tale of MacKeltish's abduction by space tars from the F.S.S. *Saturn.* He omitted the Martian saloon, however, and added a few touches that struck me as being highly imaginary.

Old Ironpants was purple as he listened.

"I'll get the Fleet Commander immediately. There's still an hour before the race is due. I'll chase this to the ground!" he stormed.

"Begging your pardon, Admiral," Shane broke in. "But we of the ship wish you'd say nothing of it. We've spent all last night until dawn searching for MacKeltish."

This was a barefaced lie.

"But you haven't found him!" Old Ironpants thundered, undoubtedly thinking of his huge bet and Mrs. Ironpants back on Earth.

"No, sir," Shane admitted. "But as supervisor of the prize lifecraft crew during these past days I can guarantee that we'll win for the honor of the

---

* "Cargo markings" in space freighting are made clearly visible on the bows of space craft, a necessary precaution to indicate to other craft what is being carried aboard. Due to the complexities of cargo and navigation this was deemed necessary by the Space Commerce Board in 2100 A. D. —Ed.

** "Plagterium" is a metal obtained from Juno which has extraordinary powers of magnetic pull. Space craft carrying this cargo have been known to collect "barnacles" of countless small metallic substances adrift in the void through the pull of the cargo as the craft passes the objects. Small space craft, like the life cruiser mentioned, would be attracted to a ship carrying plagterium if atomic motor power was of low velocity.—Ed.

F.S.S. *Western Hemisphere* without MacKeltish." He fixed Old Ironpants with a brave, resolute, confident gaze.

"You are certain of that, Sergeant?" Old Ironpants asked with ominous deliberation.

"Deadly certain, sir," said Shane. If he wasn't certain he'd be better off dead.

"Very well then," said Old Ironpants. "I'll suspend judgment on you men until the case is investigated later. In the meantime I'll not protest the race. If your certainty that we'll win without MacKeltish is correct, then those ruffians from the *Saturn* will have the punishment of losing as extra payment for their rotten trick."

A pretty speech. All of which meant that Old Ironpants wasn't taking any chances. If we lost the race, he'd invalidate it on the grounds that MacKeltish was abducted. The investigation that would result would land Shane, myself and the six space tars in the brig for the better part of our miserable lives. But if we won, Old Ironpants would be that much richer, would have saved the honor of the F.S.S. *Western Hemisphere,* and would sagely forgive us our sins.

He didn't have a thing to lose.

Shane and I had plenty. It was all I could think of in the hour that followed. The hour during which preparations were made for the great and long awaited lifecraft race between the prize crews of the *Saturn* and the *Western Hemisphere.*

JAUNTILY, as if he didn't have a thing in the world to bother him, Shane resumed his charge of our prize crew. He had picked another man at the last minute to substitute for MacKeltish, a big, beetle-browed marine named Woonsocket. He'd have to do.

Then at last our lifecraft was lowered over the side, and the prize crew of the F.S.S. *Western Hemisphere* clambered in to the loud cheers of their shipmates. Shane was coxswain.

Several hundred yards across the space harbor cheers rolled from the decks of the F.S.S. *Saturn.* She was lowering her space lifecraft, plus prize crew, over the side.*

The course was laid out over two miles, from one end of the space harbor to the other. Both boats were to start at the same time from the same end, and the lifecraft crossing the finish line first took the laurels.

And in less than ten minutes both space lifecraft were lined up waiting for the atomic cannon that would blast forth the signal to get going.

I had a good vantage point on the rail of the *Western Hemisphere* from which to watch the battle. They'd cleared a lane almost a mile wide, and aside from the atomic motored judging space launch which was to follow the progress of the two boats, no other space craft were permitted on the course.

The judging space launch was on our side of the cleared course. That is to

---

* Space lifecraft are small ships not more than twelve feet in width and not longer than twenty feet from stem to stern.

They hold a top capacity of ten men, being strictly emergency vessels. They are run by sheer, old-fashioned man power. When atomic motors and rocket power turbines go out of commission, they are really sort of human rocket boats. For there are eight small "pump handles" regularly distributed along the sides of the craft. Each of these "pumps" leads to a rocket that pipes out the bottom of the boat. When the pump is worked rapidly up and down, old-fashioned air pressure is generated in a minor rocket puff that shoots out the bottom and propels the craft along. When all eight pumps are being worked, a fair amount of "rocket" exertion can be created to give the boat some speed, which is, of course, constant when achieved.

They've saved plenty of lives in space which would otherwise have been lost when atomic motors failed, or rockets jammed.—Ed.

say the side on which the F.S.S. *Western Hemisphere* was moored. Over on the other side of the course was the F.S.S.*Saturn*. We were both about midway in the course, and the racing craft would pass between the two great battle wagons.

I was curious—and more than that —to see how the toss for position came out. For as I said, the judging spacelaunch was on our side of the course and everything depended on Shane's being able to get the position farthest away from the side along which the judging spacelaunch would cruise. It was his job to see that the *Saturn's* lifecraft was always between our lifecraft and that space launch.

I went mad with despair when the red lifecraft—ours—nosed into the position closest to the sideline along which the judging spacelaunch would move! Now the *Saturn* lifecraft was farthest from the spacelaunch. Shane's rotten luck was holding. We'd never win now . . . that spacelaunch was loaded with *plagterium* we'd planted in the hull! Was I sick?

Fffffffllllllaaannng! The atomic cannon on the judging spacelaunch boomed out suddenly.

Both lifecraft lurched forward. The race was on!

I FELT tiny needles of cold sticking all over my spine. My knees were weak, and my stomach empty. The red lifecraft was already trailing by about four yards, caught napping. *Saturn's* white lifecraft was in front.

I could picture poor Shane, face streaked with sweat, exerting, imploring, screaming at those space tars bent over the pumps. I wanted to scream myself, for the white lifecraft was inching ahead another two yards. What I couldn't picture was how Shane could have lost the toss with a *two-headed* coin! Only a man as stupid as he could have done it!

Along the lane nearest our battle wagon, the judging spacelaunch was moving less than twenty yards abeam of the white *Saturn* lifecraft.

Those *Saturn* space tars must have been giving their pumps hell. At the quarter-way mark our red lifecraft was trailing by fifteen yards.

The bedlam and excitement all around me was nothing compared to the chills running up and down my spine. I couldn't have yelled if I tried. My mouth was cotton. This was the end for us.

At the half it was no better. We'd fallen astern the white lifecraft a little more and were now twenty yards behind.

I felt as if I was going to drop from nervous exhaustion.

At the three-quarter length I happened to turn my head upward and see Old Ironpants on the bridge. He had his visascreen fixed on the race, and his face was solid stone. I winced.

We were twenty-five yards behind, now, and going into the final half mile stretch. It was more than I could stand. I shut my eyes. When I opened them again everyone on board the F.S.S. *Western Hemisphere* was going crazy. Looking down at the boats I saw the reason why.

Our red lifecraft was in front! In front and less than forty yards from the finish line!

The white *Saturn* lifecraft was crawling along a full twenty yards behind our own bunch! It was impossible but true! How Shane must have been exhorting our crew!

And then we were over the wire—our lifecraft victor by thirty yards—and our entire ship going crazy, including Old Ironpants up on the bridge!

Me? I went off in a convenient cor-

ner and sat down. My knees were very weak.

I WAS with Shane in Old Ironpants' stateroom two hours later. The old boy was beaming happily. Shane was eating it up.

"Excellent work, Sergeant. You had a wonderful crew. I must say the finish was certainly exciting and, ah, worthy of the fighting spunk of the F.S.S. *Western Hemisphere.*"

"And you won't protest the MacKeltish incident, sir?"

Old Ironpants waved his hand.

"It would turn a splendid race into a sordid squabble. MacKeltish was back on board an hour ago. Our M.P.s found him bound and gagged in a Martian canal barge. No. I'll say nothing of it."

I took a deep breath out of sheer relief.

"How did you drive them to that finishing spurt, Sergeant?" Old Ironpants demanded.

"I convinced them, sir, that a crew that won't be beaten can't be beaten. It was a question of stiffening their spirit, that's all." He smiled smugly.

Out on the deck, ten minutes late, I got Shane off into a corner.

"Look," I said. "That was very wonderful, I'll agree with Old Ironpants. But now, give me the *truth.* You know damn well we had enough *plagterium* planted in the bulk plates of the judging spacelaunch to hold our lifecraft back at an even speed with it for a year. And why didn't you use that double-headed coin of yours to get the outside position away from the judging spacelaunch?"

"I *did* use the double-headed coin, but I picked *tails.*"

"You what?" I howled.

"Sure," said Shane complacently. "The best laid plans of mice and men, you know. . ."

I grabbed his arm and shook him.

"You crazy galoot," I shot at him, "give me this straight, or I swear I'll go nuts and blame it on you."

But Sergeant Shane went blissfully on, torturing me.

"It's a smart man who can take the plans away from the Fates when they go wrong, and steer 'em right again. Only a genius like me could wring victory out of certain defeat. It was only my usual quick thinking. . ."

"Quick thinking!" I gasped. "Why, you numbskull, you haven't thought fast since the time you decided not to take on ten men at once in a saloon on Pluto, and legged it in shameful disgrace. . ."

"Strategy, that was," retorted Shane with injured dignity. "Only a fool. . ."

"And only a fool would pick tails when he knew the coin had a head on both sides!" I said bitingly.

". . . Unless he *wanted* to lose," Shane hinted coyly.

"Wanted to. . ." I stared.

"Sure. Y'see, I got to figurin' after we were ready to toss for position. With the galoots I got pumping for me, I figure the *Saturn's* lifecraft is a cinch to get the jump on us. Now it's natural the judging spacelaunch will keep pace *with the leader.* So I picked tails, and got the position next the spacelaunch, where it could *drag us ahead,* instead of *holding us back.* After that, it was just a matter of two forces outnumbering and outpowering one. When we went into the lead, our momentum was so much greater than the *Saturn's* lifecraft, that it was impossible for them to equal our speed. So we won. . ."

I gaped blankly.

"But how'd you *know* the *Saturn's* lifecraft would get the jump on you?"

The big lunkhead smirked.

"Easy, I just cut out half the pumps

for the start of the race. The controls are in the coxswain's hands, y'know."

I'm still trying to figure it out. Maybe you think Sergeant Shane used his head for once. But you don't know Shane like I do; a man's got to have a brain to think, and that's one thing my stupid buddy don't possess! Maybe Einstein could explain it, I can't. Anyway, the next race we have, I'm betting *against* Sergeant Shane, no matter what the odds. He won't ever duplicate that stunt again, take it from me!

# AMAZING FACTS

## By Guy Fauldes

### CALIFORNIA CONQUEST

ASK practically anyone as to the outstanding product of California and they will probably reply, "Beautiful blondes." But their second choice will undoubtedly be the large, succulent seedless oranges which California exports to the rest of the nation at the rate of a hundred thousand carloads a season.

The most remarkable thing about California's immense orange industry is that this fruit ordinarily would not grow in a climate such as the Golden State's. The story of the growth of the orange industry in California is another conquest of science.

Oranges ordinarily require a semi-tropical climate for the best results. To sidestep this California growers have their fields pitted with smudge pots which will throw a protective blanket of smoke about the oranges in case of any early frost. Careful pruning is also necessary to the success of the crop.

Of course the famous California orange is the seedless navel variety which is an absolute abnormality. The original tree from which the seedless variety sprung was a freak, an oddity, in Brazil. As the fruit had no seed it could be propagated only by budding or grafting. An offshoot developed this way was brought to the United States in 1870, and all of the navel oranges are descendants of this tree grafted on roots grown from seeds of oranges of other types.

So, for one State to have Hedy Lamarr *and* this unique and amazing fruit industry, seems almost like a superfluity of benedictions.

### SPINNING TOPS

THE principle that allows a spinning top to whirl about at a concentric angle is the same principle which keeps this globe we live on pointed unerringly at the Pole star in its spinning orbit. For that matter every spinning body utilizes this gyroscopic law to stabilize itself against the pull of gravitational attraction.

Modern ships employ a compass based on this principle of gyroscopic action. By adjusting a perpetually spinning gyroscope so that its axis points always to the pole, a nonmagnetic perfectly accurate compass is created. Another utilization of this principle of motion is the gyroscopic stabilizer employed on ships. Adjusted in the bow of the ship, the huge top-like gyroscopic stabilizer checks the inclination of the ship to roll with the weather. The ship's stabilizer must be of enormous size for it operates against the weight of the ship itself. The usual weight is close to 150 tons. This might seem small compared to a modern ship, but by acting instantaneously, a gyroscopic stabilizer checks the ship's roll before it attains irresistible momentum.

### IRRIGATING WITH ICE

A NEW device invented by an ingenious Texan might possibly prove to be of immense value in the conservation of water. Instead of irrigating vast areas of arid crop land with water, a rifle-like mechanism is used which fires a bullet of ice into the ground to the root of the plant. The machine which discharges these ice bullets is adjusted on a tractor which has a refrigerator system that makes a series of ice slugs to keep the weapon constantly loaded.

By firing the ice pellet directly to the root of the plant, where it will soon melt, a concentrated form of irrigation will be attained. This will do away with much of the present waste.

### AMAZING PROPHECY

ONE of the most fantastic coincidences ever to appear in the publishing business, occurred to a New England firm which makes almanacs. The editor of the forthcoming almanac was extremely busy one morning when a printer's devil hurried into his office and breathlessly demanded the weather forecast for July 13th.

The editor looked up irritably from his work "Can't you see that I'm busy?" he shouted. "Put in what you please, but get out of here and leave me alone."

Nettled at this summary dismissal, the printer's devil set the type for the July 13th forecast, predicting rain, hail and snow.

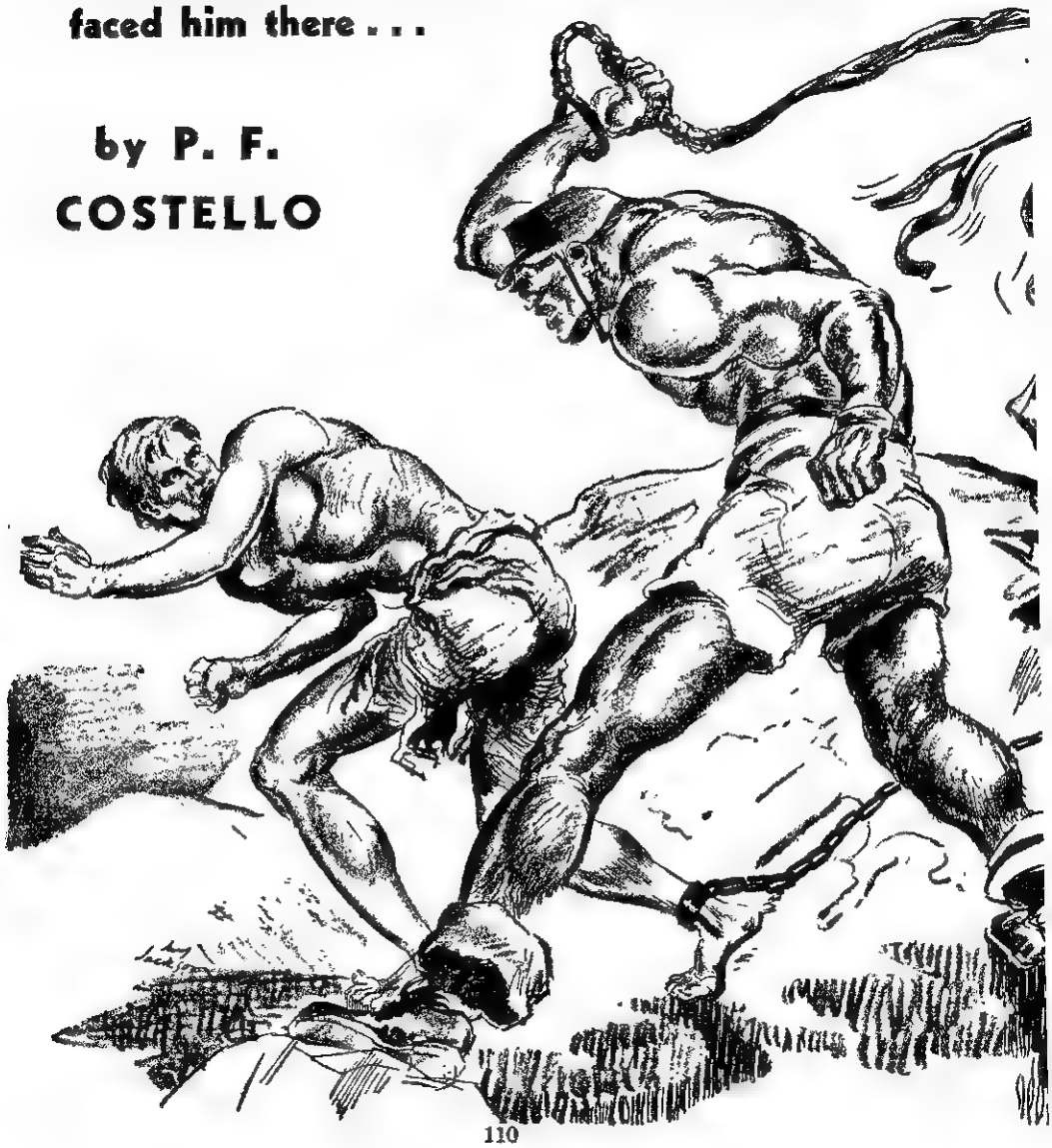
The editor was furious when the almanac was published, but his consternation can be only imagined when, on the 13th of July, it did actually rain, hail and snow!

The following year the almanac outsold all of its competitors!

# PLANET of Lost Men

**Dirk Temple saved his life by landing at this strange spaceport—but when he found out what faced him there . . .**

by P. F. COSTELLO



DIRK TEMPLE stared woozily at the intricate indicators on the visa-board of his sleek speeding space ship.

Through an alcoholic fog of three days density his brain tried vainly to make the necessary deductions from the graphs and charts and meters that pitted the surface of the shiny chrom-alloy control panel.

The guard's whip lashed through the air and came down on Dirk's bare shoulders

It was no go. The indicators bounced crazily before his blood-shot eyes confusing him hopelessly.

He leaned helplessly back in the pilot's chair of the trim single seater and came to a profound decision.

"I am drunk," he said aloud.

Pleased by his astuteness in figuring this out for himself he smiled genially and reached for the square bottle of Martian brandy beneath his seat. He lifted the bottle to his lips but only a few drops of the fiery liquor dribbled over his chin.

"Empty," he said profoundly. "Can't fool me."

He dropped the bottle and kicked the deceleration lever with his foot.

As long as he didn't know where he was going there wasn't any particular hurry.

For three days he had been saturated with liquor and boredom. This particular binge had started at the swanky summer resort on Jupiter's cool side. It had no rhyme or reason, but then, few of Dirk Temple's actions ever did. Too much money, too much leisure, and too few responsibilities had turned him into a carousing, wasteful interplanetary playboy.

The stamp of his excesses was apparent in his blood-shot eyes, his flabby muscles and the petulant cast of his mouth and jaw.

The nose of the ship was dipping fast now, but Dirk was almost dozing in his seat. The ship continued to drop, and it was not until it had hissed into the atmosphere of the planet again, that Dirk's head snapped up.

A glance downward showed him the green sprawling expanses of Jupiter's unexplored areas, a vast plain of desolation and death. Cursing furiously Dirk manipulated the controls frantically. One rocket sputtered and missed and the ship lurched about in a wild arc as the remaining tube's off-balance bursts slewed the ship around.

For minutes Dirk fought the ship, trying to level it out and straighten its course. Sober, he might have accomplished something, but his drunken, confused efforts did more harm than good.

The ship continued its circling spin unchecked.

Dirk Temple decided his number was up. He didn't give a damn anyhow. Twisting in his seat he glanced out the pilot's sideview window, curious as to the exact terrain he had picked to honor with his last remains.

He stared downward, then shook his head and blinked. It wasn't possible—he peered downward again incredulously.

For spread out below him was a wide clearing containing a number of dwellings that looked about the size of toy blocks from his altitude. But more incredible than this—and more heartening—was the gleaming length of a mooring tower rising toward him. Two of the mooring sockets he saw were occupied by late style space craft, but several of the sockets were invitingly empty.

DRUNK as he was, and as unpredictable as his ship was, he brought it about in a fast circle and headed its nose for the nearest socket.

His timing and speed were off. As the nose of the ship plowed into the mooring socket he kicked the deceleration bar and slammed home the reverse rocket levers at the same instant. But not soon enough. The ship crashed hard and metal grated against metal with a crunching, rending noise.

Dirk's head snapped back with the impact, and a thousand firecrackers seemed to explode in his liquor-sodden brain. He slumped to the floor of the ship under a blanket of darkness.

"TOSS the drunken bum into a bunk. He's not hurt."

Dirk heard these words, heard the cold brutal voice of the speaker as if it were coming from a great distance. Through the black fog that blanketed his brain, a faint light was beginning to creep. He felt hands on either side of him, heard scuffled footsteps vaguely.

Weakly, he attempted to press his hands to his aching head.

"He's comin' around, Boss," a voice said next to him.

The footsteps stopped. Dirk realized that it had been his own footsteps as they led him along that he had heard. He shook his head and then opened his eyes.

A huge, powerfully built man was standing in front of him, staring at him with an expression of sullen anger stamped on his coarse features. He wore boots, breeches and a leather shirt. Heavy, business-like atomic revolvers were strapped to his thick waist. His hands propped on his hips were the size of battered hams and his bare arms were like the limbs of a gnarled tree.

Beside him, Dirk noticed two other men, smaller, but equally villainous looking. They also carried guns strapped to their waists.

Strength was finding its way back into his numbed legs, and his head was clearing a little from the shock of the landing and the after effects of the Martian brandy. The men on each side of him were not holding him *up* any longer. They were just holding him.

"Start talking," the big man snapped. "What the hell do you want here? How'd you happen to moor here?"

Dirk passed a hand over his forehead and smiled.

"It was quite accidental, I assure you. I—I'd been drinking and my ship was out of control when I spotted your mooring tower. A lucky thing for me that I did."

"Maybe not," the big man said ominously. "We aren't hospitable to visitors here."

The smile faded from Dirk's face.

"What do you mean?" he asked, puzzled. "I'm sorry about smashing your mooring tower, but I'll make it right with you. My name is Dirk Temple. I'm good for any reasonable amount you say."

He glanced up to the top of the mooring tower appraising the damage done by his faulty mooring.

"A couple of thousand *tipecs** should take care of the damage," he said.

"So you're Dirk Temple, eh?" the big man said musingly. He flashed a quick meaningful glance at the two men who stood beside him. "In that case we'll do our best to accommodate you. You need sleep right now so I'll have you taken to a bunk. In the meantime we'll get your ship ready so that you can take off when you feel up to it."

"That's awfully nice of you," Dirk said, smiling. "I suppose I have been acting like a fool, trying to pilot a ship half drunk. A few hours sleep will fix me up though."

"Sure thing," the big man said. He turned to one of the men, a short, stocky blond with a broken nose. "Buck, take Mr. Temple to one of the rooms with a clean bunk. We'll let you know when we've got the ship in shape, Mr. Temple."

"Do that, will you?" Dirk said pleasantly. "And thanks a lot."

"Don't thank me," the big man said.

DIRK followed the man called Buck across the clearing. Houses made of tough, mahogany-like wood from the swamps of Jupiter were erected in a semi-circle, meeting at a huge, steel gate which led, Dirk guessed, to the open, unexplored regions of this section of the planet. The entire cleared stockade was surrounded by a high steel fence, and over its top Dirk could see tall rambling buildings. Except for the wooden dwellings in the stockade the only other object was the tall gleaming mooring tower. Long freight ramps connected with it and led off to a side gate in the stockade fence.

There was one wooden building larger than the rest, that was obviously some sort of office. Dirk wasn't particularly interested however, in anything but sleep.

His guide led him to one of the dwel-

**Tipecs*—worth approximately five Earth dollars.—Ed.

lings, opened the door and motioned him inside.

"There's a bed there," he said surlily. "Use it."

Dirk stepped into the room, saw a bunk in the corner and headed for it. His head was aching, and the effects of the Martian brandy had not completely worn off. Stretching out on the bunk he relaxed completely. He wondered idly for an instant about the peculiar place he had landed. The fences, the air of unfriendliness, the armed guards all added up to a big question mark in his mind. But he was too tired to worry about it. Even if he had been perfectly fresh, it is doubtful whether Dirk Temple, billionaire playboy, would have bothered about it. In a few seconds he was asleep.

TWO things awakened him. The first was a burning thirst, the result of his three-day binge on Martian brandy. The second was a dull thumping noise that seemed to be a part of the ground itself. It was rhythmic and unchanging, jarring slightly the supports of the bunk on which he was lying.

With some difficulty he struggled to a sitting position. Although his head still ached, it had cleared of the fuzzy alcoholic cobwebs. Except for a general muscular stiffness, he was as good as new. Which didn't signify much, he told himself wryly.

He stood up and walked to the door, wondering where he could get a drink. It was dark outside, but floodlights situated at the corners of the stockade provided adequate illumination.

Stepping through the doorway he became aware that the pounding noise emanated from out the stockade. The heavy steel main gate was open, he noticed. Hands in his pockets he strolled across the stockade and peered curiously through through the gate.

He saw then what caused the throbbing, tramping noise.

It was a group of men; row after row, slowly moving on the march. They passed silently past the stockade gate moving like robots. Dirk saw that they were shackled together by four-foot lengths of chain at the ankles. He was within twenty feet of the slowly moving lines of men, but not one man glanced in his direction. Their heads drooped forward, their shoulders slumped, they shambled along like walking dead men.

Somehow the spectacle gave Dirk a strange chill. If they had looked at him, or spoken, it might have been different. But their expressionless faces and silent, machine-like strides brought the hackles up on the nape of his neck.

For several minutes Dirk watched the rows of silent men file past him. Then he scratched his head and shrugged. It looked funny, but after all, it wasn't any of his business.

Turning he retraced his steps. He had not traveled more than fifty feet beyond the rows of wooden dwellings when a low, urgent voice sounded suddenly in his ear.

"Please! Please help me!"

Dirk halted abruptly, staring about.

"Here. Over here," the soft voice said anxiously.

DIRK turned, and following the sound of the voice, cautiously approached a darkened one-room dwelling which he had just passed. The building was somewhat in the shadow of the stockade lights but in the dim light he could make out a figure at the window of the dark hut.

"What's up?" he asked.

"Please believe me," the figure at the window said imploringly, "you're in serious danger. You must get away from here at once. Send the Federation Police back here, if you can. It's

the only chance for any of us."

DIRK started in amazement as the voice reached him clearly. For it was a feminine voice, throaty and soft, but charged with terrible earnestness and fear. He stepped closer and saw a pale, delicately chiseled face turned toward him, and two dark eyes meeting his imploringly.

"What the devil!" he said explosively.

"Please be careful," the girl whispered frantically. "One of the guards might hear you."

"Somebody's going to hear from me," Dirk said grimly. "The idea of keeping a lovely girl like you worried and scared. What's wrong, anyway?"

"There's no time for that," the girl said breathlessly. "Just get away from here. Now. This instant. Send help back if you can."

"If you want to leave," Dirk said decisively. "I'll take you with me. I'll see that nobody shoves you around. I'm going to give the big slob that runs this joint a piece of my mind as it is."

"*Please!*" the girl's voice was desperate. "Don't go near him. Get away while you can."

"I wish you'd tell me what's up?" Dirk said.

"There's not time," the girl said desperately.

Dirk stepped closer to the girl. He noticed that she had light blonde hair, a big mop of it shoved back from her high, pale forehead. He could smell its subtle perfume on the dark air of the night.

"Don't worry," he said. His hand closed reassuringly over her small fingers. "When I'm ready to go I'll go. And I'll take you with me."

"Maybe!" a harsh voice snapped behind him.

Dirk wheeled, but a hard object jammed into his ribs.

"Behave," the owner of the voice said ominously. Dirk saw that it was the stocky, broken-nosed fellow called Buck who had surprised him.

"If this is your idea of a joke," he said angrily. "I don't like it. Take me to the person in charge of this place."

The atomic revolver jammed into his ribs.

"That's just what I was goin' to do."

The girl was looking at Dirk, a dull hopelessness in her eyes.

"Don't worry," he said confidently. "I'll have this whole business straightened out in a few seconds. Then I'll be back."

"This way," Buck snapped.

Dirk followed the man across the clearing to one of the larger rooms in which a light was burning. Buck opened the door and allowed Dirk to enter first.

Seated at a desk in the middle of the sparsely furnished room was the big man whom Dirk had seen on arriving.

"Found him talking to the girl," Buck explained. "From the looks of it she'd been singing. I guess he also saw the men leaving for work."

"That's too bad," the man behind the desk said cryptically.

"I demand to know what's going on here," Dirk blazed. "Who has been intimidating that young girl? What are all these men doing out here? There's something here that smells and I'm going to report it to the Federation the minute I get back."

"No," the big man said softly, "you aren't going to do any such thing. Because you aren't going back. Ever."

"ARE you crazy?" Dirk shouted.

The big man shook his head.

"I don't think so. I did intend to fix your ship up and let you leave. Be-

cause the unexplained absence of Dirk Temple would be looked into. And I don't want anybody looking into things here. So I thought the thing to do would be to let you clear out of here, trusting on your drunken condition to prevent you from remembering much of the place. But since you've snooped around you know too much. My original charitable intentions have been changed. You stay here now for the rest of your life."

"The hell I do," Dirk exploded. "You can't get away with this. My disappearance won't go unnoticed."

"I'm going to risk that. If anyone did show up however, it is improbable that you'll still be around and kicking."

Dirk paled.

"Do you plan to murder me?"

The big man smiled.

"I have something better in mind. That soft flabby body of yours is going to be chained with a line of other slaves and made to work. You won't last long. Strong men last a year at the most. You'll cave in a few weeks. That will save me the bother of killing you and I'll also get some work out of your soft carcass."

"You can't do this," Dirk cried. "It isn't f—fair."

The big man stood up, stepped around his desk. His face was as hard and square as a ragged piece of granite.

"My name is Skarack," he said. "There's only one law here and that's me. You're my slave, body and soul, from this minute on. I'm going to work you to death and I'm going to enjoy doing it. Your money and your position and your fine friends will never help you now. You're a walking dead man from now on."

"You can't get away with this," Dirk cried.

Skarack smiled thinly. Then his heavy fist lashed out and slammed into Dirk's jaw. Dirk staggered back, crashed into the wall and slid to the floor. He was still conscious, but his head felt as if a mule had kicked it. Every muscle in his body seemed paralyzed. He tried to climb to his feet, but Skarack's heavy boot crashed into his ribs, drove the air from his lungs.

"Here I can get away with anything," Skarack said. He turned to Buck. "Put him in line and see that he learns how to work."

Buck grinned wolfishly.

"You bet," he growled.

Stooping, he slunk Dirk's limp body to his shoulders and lurched from the office.

THE next sensation that penetrated to Dirk's consciousness was the sound of monotonously shuffling feet, and the occasional metallic clank of chains. For a timeless interval he knew that and nothing more. Then he gradually became aware of his own forward motion. He was in line, chained to a man in front and another behind him, walking forward in jerky, robot-like motions.

But beyond these elementary realizations his mind was unable to travel. Like a man in a living dream he slouched along, jaw slack, eyes dull. He was chained. He was walking. That was all he knew.

Time passed. Finally the forward motion ceased. Like a soulless beast he stood in his fetters, without the will or inclination to move an eyelid.

Gradually his mind began to clear. The transition was not swift, but it was steady. He became aware of the men next to him, of guards, of vast expanses of rock spreading before his eyes.

"Get to work," a voice yelled.

Dirk saw his fettered companions raise blunt instruments resembling pick-axes over their heads and attack the rocky soil with the sharp, scoop-like blade. There were other lines of men working other sections of the rock heap. Like twisted snakes the lines wound about, up and down hillocks, through stunted vegetation.

In his hands Dirk was aware was one of the picks. A black engulfing despair settled over his soul. Then bitterness flooded over him.

"I'll be damned if I'll work" he shouted. With all his strength he flung the pick away from him.

"Take it easy, friend," the man on his right cautioned in an undertone.

"Why should I?" he yelled. "I'm no slave. I'm Dirk Temple. I'll get out of here, I tell you. I'll get—"

*"Watch it!"* the man on his right hissed.

His warning was too late. Dirk had not seen Buck, the broken-nosed guard coming up behind him. He had not seen the cruel, blunt whip swinging.

All he knew was its sudden vicious bite as it slashed across his back. Again and again it fell wielded with all of Buck's strength and deliberate cruelty.

Dirk pitched to the ground moaning.

The lash contiued to rise and fall, until Dirk's back was criss-crossed with ribbon-like welts. Then it stopped.

"Now." Buck panted, "get to work."

It took Dirk minutes to crawl to his feet. Someone tossed the pick at his feet and he picked it up dully. He swung it once to the ground and almost cried out as his muscles worked under his frayed, stinging skin. But it was better to swing the pick and writhe with every movement than to provoke another assault by refusing.

THE man on his right spoke through set lips.

"It don't do no good to blow up. Keep your mouth shut and you'll live longer."

"Who wants to live?" Dirk almost sobbed.

The man on his right went on working without replying.

The day wore away. There was a brief pause about mid-day but no food was served. When the lines of shackled men were ordered to quit, Dirk's legs were trembling with fatigue. His lacerated back throbbed with excruciating pain. Blood was dripping from his finger tips, welling from his blistered, cut palms.

They filed along until they came to a metal doorway leading to one of the large sheds. Then the line slowed to a jerky crawl.

"Inspection" the man walking beside him grunted.

When Dirk reached the doorway he saw that a half-dozen guards with drawn atomic pistols checked the men in. One of the guards had a sponge-like object in his right hand. As each prisoner passed him he slapped him on the shoulder with object in his hand, and shouted out a number. Dirk was next in line.

"New one," the guard yelled.

Dirk was thinking of something that had eluded him all day. It was the girl. He remembered now his last words for her. "I'll be back for you." That's what he'd told her. A bitter smile touched his lips.

He stepped ahead, the guard's hand rose and fell. The sponge-like object pounded into his shoulder. A swift tingling raced through his body, as if invisible hot needles were probing his body, for nerve centers. He started to wheel, an angry yell forming on his lips, but he didn't.

He plodded on instead, his jaw slackening, his eyes glazing. He knew noth-

ing else until he came around from his strange torpor and discovered that another day had dawned.

He was shackled to the same line of convicts, his pick was in his hands and a snarling voice was yelling:

"Get to work!"

"Surprised?" it was the clipped voice of the convict on his right. Dirk noticed that he was a small, compactly built man of almost middle age.

He swung his pick twice before answering:

"Yes. What is it?"

"Electrical hypnosis." The answer was swift. "Sponge in guard's hand is studded with quills. Shoots a charge into us, knocks us out. Keeps us from planning, talking, thinking about getting away." *

"Just work and then a complete blank-out," Dirk grated bitterly. "I'll be glad when I blank-out for good." But he was thinking about the light-haired girl when he spoke, and he wondered if he meant it.

In the next week Dirk learned much from the prisoner chained to his right. The man's name was Vyers and he explained the incredibly brutal and inhuman system which Skarack operated.

Through an arrangement with corrupt officials at the great prison base of Plubium, which was only sixteen hours from this section of Jupiter, Skarack had managed to have hundreds of convicts shipped to his mining settlement. The prison wrote the men off the records as having died, but actually they went to the living death that Skarack had arranged for them. Without the overhead of labor he was able to make fabulous profits from his mineral mines.

The tip of Dirk's pick bit deeper into the rocky soil as he thought of it. There was a new set to his jaw and a strange glint in his eyes that had not been there before.

"I'll live," he muttered to himself. "If I have to wait a hundred years I'll pay him back."

"No," Vyers shook his head briefly. "You won't. The constant electric hypnosis will kill you in about a year. No one can last longer than that. Then there will be more convicts to replace us."

Dirk slammed the pick into the ground and the stout handle almost splintered under the impact.

A LONG one hundred and eight-day Jovian "month" passed without change. The convicts labored, were knocked out electrically, labored again. Some died. Others came.

Dirk Temple continued to swing his pick savagely. His hands were as tough as alligator skin, and his complexion was blackened by the sun. The bloat of dissipation had melted from him, leaving him clean-limbed and powerful. These were the physical changes. Something had happened inside Dirk that no one could see. It was something that grew from a white hot core of hatred into a mighty force of determination that was as inevitable in its way as a waterfall. It showed itself in the grim smile that hovered on his lips. In his silent acceptance of the lashings that fell to him. But most noticeably it was evident in his eyes. They were like the windows of Hell; awful in their cold, deliberate, flaming hatred.

The only soft thought that entered his mind was that of the girl he had seen so briefly his first night in this

* The exact nature of the "electrical hypnosis" is, of course, unknown, but it was probably not hypnosis at all, but a form of nervous shock that rendered the nervous system incapable of conveying messages for a period of hours, with a resulting apparent state of unconsciousness. Obviously, however, subconscious nervous functioning was not impaired, or death would have resulted. The victim would have "forgotten" to breathe.—Ed.

morass of misery. He thought of her, not as living, but as belonging to his own dead past. Something beautiful and tender that had been destroyed.

His pick slashed into the ground.

"One more score," he muttered.

When he jerked his pick loose he noticed a few green threads of moss clinging to it. With his next blow he uncovered a patch of the peculiar Jovian creeping moss. It was wiry, hardy stuff, its thin individual filaments tough as strands of steel.

"Vyers," he said tensely. An idea had struck him with the suddenness and force of a lightning bolt.

Vyers glanced up.

"Yes?"

"Will this moss conduct electricity?" his voice was strained.

Vyers shrugged.

"Maybe, maybe not. Why don't you try it?"

"I'm going to," Dirk snapped. "Listen to me. I'm going to make a pad with this stuff, shove it under my jacket. Maybe I won't be blanked out tonight. That's all I need. One night."

"You're mad!" Vyers hissed. "You'll be caught. Killed."

"Fine," Dirk's eyes glowed. "That's where I can't lose. Either way I'm better off. Want to try it with me?"

"No," Vyers said nervously. "No!"

But that evening as the line of prisoners wound past the guards there were *two* convicts with slightly padded right shoulders. Vyers went through first. Then Dirk stepped up. His number was bawled out, the guard's hand whacked him on the shoulder. Dirk's body stiffened to resist the customary sensation, but with a sudden wild feeling of delirium, he noticed that the usual effects were lacking. He started to step on, but the guard's command halted him, nerves quivering.

"Hold it you. What's wrong with that shoulder?"

Dirk turned slowly, feigning stupor.

"Hurt," he mumbled, "Fell on rock."

His hands curled into fists, as he watched the guard through lidded eyes. He was prepared to fight now, regardless of outcome.

The guard hesitated an instant, then waved him on.

"Don't be so damn clumsy," he shouted after him.

Dirk slouched on, careful to affect the drugged walk of the other prisoners. But his heart was pounding madly with excitement and hope.

IN THE central eating room which Dirk remembered but dimly and foggily the prisoners were unshackled. Food was set before them and soon the air was full of the sounds of greedy feeding.

Dirk kept his head over his plate pretending to eat ravenously. Guards walked back and forth behind the diners, occasionally shoving a drugged prisoner's head into the sloppy stew just to hear him grunt and strangle.

The meal was finally over. The men were led to their bunks. Dirk climbed in as did the rest. Through the meal he had not attempted to catch Vyer's eye, for one glimmer of intelligence on the part of a prisoner would be an instant give-away to the guards.

Now he waited tensely till the guttural snores of the men would cover any noise he might make, then slipped from his bunk.

Instantly a shadowy figure joined him. Vyers!

They did not speak. One iron handshake was all they needed. Then they moved as silently as wraiths through the sleeping room, into the eating room. In Dirk's mind was only one desire. And that was to feel Skarack's writhing throat under his hands.

He motioned Vyers to additional caution as they approached the large doors that led from the eating room. There was a guard stationed outside this door. Little vigilance was exercised over the electrically drugged prisoners.

This was one thing Dirk was counting on.

He shoved the door open a cautious inch. The guard was *not* sleeping. He was pacing up and down before the door and he wheeled, swinging his gun up as it opened slightly.

"Who is it?" he snapped.

To close the door would be an invitation for him to throw the great bolt in place and sound an alarm. Dirk did the only other thing possible. He hurled the door wide open and lunged with the speed and ferocity of a tiger at the startled guard.

His furious driving lunge carried him to the guard's throat before the deadly atomic pistol could be brought into action. It was over then in an instant. Dirk's gnarled, powerful hands contracted like the segments of a vise, and the guard's eyes rolled desperately. With a final wrench Dirk stood up.

Vyers grabbed the corpse by the feet and dragged it into a shadow.

They were outside the prisoner's quarters now. The stockade fence faced them, high and impassable. The gate was heavily guarded with a half dozen armed guards.

But Dirk had been doing a little thinking.

"The side gate by the freight ramp," he snapped. "It's almost deserted now because there hasn't been a shipment in months. Let's try it."

It took them twenty minutes to skirt the fence and reach the side gate, but when they did a glance showed them their efforts had not been wasted. The gate was not guarded, and it was covered with tough, thick creepers that wound all the way to the top of the fence.

HAND over hand the two figures went up the twelve-foot gate. Stuck into Dirk's belt was the guard's atomic pistol. Its cold, heavy bulk was reassuring.

They dropped to the ground, crouched still for an instant to make sure their descent had gone unnoticed, then started off. They had circled half way around the stockade making for Skarack's office when Dirk stopped. He was standing in front of the dwelling where he had seen the blonde-haired girl. Motioning Vyers to wait he stepped to the door. What he was doing was wild and crazy but he couldn't stop himself.

The door was fastened from the inside. He hesitated for a brief fraction of a second, then moved his shoulder slowly, but inevitably against the door. If anybody else were inside, he decided simply, he would kill him.

For a while the door held, then a bolt shattered and Dirk slipped swiftly into the room.

"Don't scream," he said. "Please don't."

He couldn't see her, but he knew she was present. Her subtle, warm fragrance was everywhere in the room, a part of it.

"W—who is it?" the question came from the opposite side of the room.

"Don't you remember?" he whispered. "I'm the fellow who said he'd be back. I always keep my word."

A sound like a sob came from the girl.

"Thank God," she said softly. "I thought you'd been killed long ago. But how are you here?" there was swift alarm in her voice.

"Escaped," Dirk said briefly.

"We've gone as far as we can right now. It's farther than we hoped to get. Our next stop is Skarack. When I'm through with him I don't care what happens to me"

"Or anyone?" she asked.

He was silent. Then:

"How did you come here?"

"My father owned this property at one time," she answered. "Skarack was his foreman. I was in school on Earth and my checks always came from here promptly. What I didn't know was that father had died years ago and that Skarack had taken over, even to the extent of seeing that my checks were mailed to keep me from becoming suspicious. Finally I got lonely, jumped in a one seater and started off for here without letting anyone know where I was going. When I found out the truth Skarack refused to allow me to leave. He's made me offers, but I've told him I'd rather kill myself."

Dirk couldn't think of anything to say.

Vyers stuck his head in the door.

"Hurry up," he whispered, "we haven't got much time left."

"If there was any way at all of licking Skarack *and* his mob," Dirk said, "I'd take it. But there isn't. That's why we're concentrating on him."

"Just a minute," Dirk heard the girl slip from her bunk, cross to him. "There *is* a chance if you want to take it. All you need is more alive, alert men. Well, Skarack has a solution that will break the electric hypnosis. He perfected it in case he ever had to move the men or put them to work after they'd been drugged. He told me this one night when he was drunk. That same night I stole a bottle of the drug, hoping I'd get a chance to slip it to someone who could get it to you, or maybe some other prisoner."

"I don't get what you're driving at." Dirk frowned.

"Just this," the girl said breathlessly. "If I gave you the drug and you could slip back and awaken a dozen more men you'd have a chance to overthrow Skarack's entire horrible system here. If you just get him, someone will take his place and these hundreds of helpless men will be no better off. You can take your private revenge if you wish, but you won't be satisfying anyone but yourself."

"It's an awfully long gamble," he said grimly.

"Maybe I haven't the right to ask you to take such a chance," the girl said softly.

"You can ask me anything," he snapped, "anytime, anywhere. Anybody with your guts doesn't need to apologize for asking someone else to take a risk. Give me that bottle of dope."

The girl uttered a happy, choked cry and slipped away from him. She returned in an instant and thrust a slim vial into his hands. A hypodermic needle was strapped to the bottle.

"Good luck," she whispered.

He kissed her then.

"I'll be right back for you," he said, "and remember—I always keep a promise."

Wheeling he slipped out the door, pulled Vyers into the shadow of the hut and hurriedly explained the new situation to him.

"It's a chance," he said grimly, "for everybody."

"What're we waiting for?" Vyers snapped.

AN HOUR later Dirk opened the huge eating room door cautiously and peered out. The stretch approaching the stockade fence was clear. Turning he motioned with his hand, then stepped through the open door.

Vyers was at his heels. Following Vyers in close formation came twelve crouching shapes, armed with picks and clubs.

The serum had worked swiftly. Dirk and Vyers had selected the hardiest and gamest of the prisoners to administer the counteractive drug to. The men aroused from the stupefying effects of the electric discs had been hard to restrain. Once they realized that they were free they wanted to charge Skarack's office and tear the man to pieces.

Now Dirk paused, held up a hand The shadowy shapes behind him froze into rigidity.

"What is it?" Vyers asked.

"Look!" Dirk pointed to the main gate. "The guards have evidently turned in. Maybe a surprise attack at that point will turn the trick for us."

"Long shot," Vyers muttered.

"What isn't?" Dirk snapped. "Come on!"

Slinking across the lighted areas like stalking wolves the small band reached the shadow of the fence and followed it to the main gate.

Dirk stole forward alone then. He tried to keep himself from dwelling on the tremendous stakes of this game he was playing. His own life was insignificant, but the courageous girl and the men who trusted him had to have a break. He couldn't let them down.

Crouching before the gate Dirk racked his brain for some method to storm the unguarded entrance. With the futility of desperation he leaned against the massive gate and shoved with all his strength.

Then his heart leaped for the gate gave way under his shoulder and swung slowly inward. Trembling with excitment Dirk waved to the line of crouching silent men.

"We've got a chance now," he hissed as Vyers crept alongside him. "Stick right behind me and be prepared to scatter and fight on the inside."

Cautiously he shoved the heavy gate open, stepped into the the stockade. All was quiet and still. He panthered cautiously ahead, the ragged horde of prisoners at his heels.

His eyes raked over the seemingly lifeless buildings.

Suddenly he wheeled, shouted at his men.

"Get out! It's a trap!"

But he was too late. The massive stockade gate was already swinging shut and, from behind it, a dozen guards sprang. Their revolvers were out, ready for instant action.

Dirk cursed bitterly, but he saw instantly that resistance would be worse than useless. His whole being raged at the realization that they had been easily and stupidly trapped. But there was nothing to be gained by lunging at the guards. It would only bring a fiery rain of atomic pellets on all of them.

"Easy men," he cautioned. "They've got us."

"Drop your weapons," one of the guards ordered.

SULLENLY the men dropped their picks and clubs to the ground, and with them dropped their own hopes. They stood stolidly grouped together now, lips twisted bitterly.

To their right a door banged open, then a familiar voice snapped over their heads.

"You scum are more stupid than I thought. You've proved it by pitting your puny wits against mine."

Dirk turned slowly. In the door of the office stood Skarack, his immense bulk filling the opening. A red river of hate was coursing through Dirk's veins. Fists clenched, he strained toward Skarack, but Vyers jerked him

around.

"Fool," he hissed. "He's waiting for a chance to burn you."

Skarack strolled into the storckade before the helpless prisoners, thoroughly enjoying the moment of triumph. Two of the guards stationed themselves on either side of him, covering the ragged prison horde with their atomic pistols. The remaining guards shoved their guns back into their holsters and started to collect the picks and clubs.

"You stupid, spineless curs," Skarack's voice lashed at them, "Did you think you'd get away with this thing for even a second? I can't believe you're that moronic. I know everything that's done or said here."

Vyers gripped Dirk's arm.

"The girl," he grated. "She ratted on us. You were a fool to go near her, to trust her."

"No," Dirk said desperately. "No. She can't be in on this thing. She wouldn't sell us out."

"Shut up," Skarack roared. "I'm talking. I want to know the ring leader of this business. Any man who tells me will go free. The rest will be returned to work. I just want the name of the man who started this. I don't give a damn about the rest. All right. Speak up!"

A heavy silence answered him.

"I'll give you till I count three to talk," Skarack said grimly. "If no one has unbuttoned his yap by then I'll give my men orders to fire into the lot of you."

He held up his hand.

"One!"

Dirk smiled, a lean bitter smile.

"Two!" Skarack shouted.

Dirk started to step forward, but suddenly a feminine voice said,

"I can tell you the name of the ring leader!"

Skarack wheeled, as did Dirk and the prisoners, toward the voice.

Dirk felt the blood turn cold in his body. The blonde girl was standing in the doorway of her wooden dwelling, smiling provocatively at Skarack.

Vyers swore furiously.

DIRK felt a sickness and weakness over his body. The girl *was* in with Skarack. She had listened to his plans, talked him out of killing Skarack when there was a chance that it might have succeeded. Instead she had persuaded him to assemble more men, waste more time. Then she had tipped off Skarack as to what was brewing. Now she was completing her day's work by putting the finger on him.

"You know something about this?" It was Skarack speaking. He sounded strangely skeptical.

"Sure thing, big boy," the girl smiled. She stepped from the doorway and walked toward him, her slender body swaying enticingly. "I heard a few things that might interest you. After all you're the brains of this place and you'd know best how to use information like this."

"So you're getting smart, eh baby?" Skarack chuckled.

The girl walked behind the first guard, and Dirk suddenly noticed that her right hand was concealed in the folds of her dress. His muscles tensed. Maybe . . .

The girl moved swiftly. Her hand swung at the guard's shoulder. Skarack bellowed in surprised rage and leaped for her, but the girl ducked his flailing arms and dove at the other guard, swinging her arm again in a wide arc that connected with the guard's back.

Skarack leaped for the girl, swinging. His ham-like paw struck her a glancing blow on the shoulder, knocking her sprawling to the ground. He wheeled, shouting at the guards, his own hands

clawing at the gun in his belt.

Dirk dove forward and catapulted himself at Skarack's huge form. His iron-hard shoulder slammed into Skarack's middle with the force of a battering ram. Both men rolled to the ground, fists driving like pistons. Behind him Dirk heard the sounds of shouting, struggling men, but he had a battle on his own hands that needed his attention.

Skarack attempted to drive his knee into Dirk's groin, but missed as Dirk slammed his fist wrist-deep into the big man's belly. Dirk knew a merciless, grim joy as his rocky fists battered into Skarack's face and body.

His hands fastened into the big man's leather shirt like iron claws. Rising then, he jerked Skarack to his feet. The big man flailed wildly at him, but Dirk stepped under the blows and let his right drop in a vicious chopping stroke across the man's jaw.

His cold fury drove him on relentlessly. His heavy, powerfully packed shoulders swayed rhythmically as he exploded rights and lefts into Skarack's face and body. Blows that were as fast as the flick of a snake's tongue, and as savagely destructive as a trip-hammer.

Skarack staggered back and Dirk stepped in throwing all of his hatred and pent-up rage behind one ax-like blow that blasted into the big man's loosely hanging jaw. A dull *crack!* sounded. The noise might have been made by a thick branch snapping. But Dirk saw Skarack's queerly twisted position on the ground and knew it was no branch. The big man's twisted, red neck had made the noise.

Dirk twisted about, but he saw then that the fight was over. The prisoners had leaped on the guards when their attention had been distracted by the girl. They had soon finished things.

Dirk sprang then to the side of the girl and helped her to her feet. On her right palm he saw a red, sponge-like object.

"You were magnificent," he said simply. "I deserve a thrashing for even thinking you might have double-crossed us."

The girl smiled and held up the electric hypnotic pad with which she had put the two guards out of commission.

"The only way I could think of to get near enough to use this was to pretend to have changed my mind about everything. I stole this hypnotic pad from Skarack's office, hoping I'd get a chance to use it sometime. When I saw that he had discovered your plot I decided I'd never get a better opportunity to at least *try* to use it."

Vyers came up smiling.

"Everything's under control," he said happily. "Guards rounded up, Skarack out of the way—for good. When we get the supply of the hypnotic antidote we'll let the rest of the men loose."

"Perfect," Dirk said.

He looked down at the small fair head close to his shoulder. Then he put his arm around her shoulder.

"Perfect," she murmured.

---

JUPITER'S STRIPED JACKET

THE canals of Mars have been advanced as possible attempts on the part of inhabitants of this planet to contact Earth. Now in one of the largest of the Sun's planets, a somewhat similar phenomenon has been noted by astronomers. It is the symmetrically striped appearance of Jupiter. Scientists are unable to account for the existence of the rings which circle the huge planet in much the same manner as do our meridians.

These indications along with static which has been heard during the last decade, and which scientists agree emanates from space, would seem to make even stronger the case of those who believe the neighboring planets to be inhabited by intelligent life.

# WORLD'S GREATEST GOLDFISH BOWL

## By ALLEN RANKIN

JUST a little south of St. Augustine, Florida, there exists what is probably the world's most astonishing aquarium. Appropriately named "Marineland," this gigantic goldfish bowl is comprised of twin tanks which house approximately 40,000 fish of every imaginable variety.

At Marineland, the visitor is able to see life in the marine world almost exactly as it exists in undersea reality. The designers of this aquatic marvel have, in addition to providing coral reefs and sunken rock ledges, even placed a sunken ship hull in the setting to make the surroundings doubly realistic.

Unlike most of the aquariums of today, Marineland does not segregate the various species of fish in individual tanks. Here you see sharks sporting in the same waters as porpoises, devilfish haunting the same precincts as mullets. Visitors to Marineland are never without interesting—and often exciting—spectacles, and through some two hundred observation portholes arranged along the tank sides at varying underwater levels, they see the creatures of the undersea world living, dying, spawning, quarreling, and carrying on their daily existence in ways sometimes very similar to those of our own world.

Scientifically, Marineland has been a godsend to the students of fishlore. For, due to the opportunity for close study of the creatures living in conditions closely approximating those of their actual life, biologists are able to get a far clearer picture of aquatic existence than ever before.

It is interesting to note that, in spite of the cannibalistic habits of many fish, the curators of Marineland have been able to almost completely eliminate such intertribal feastings. This is prevented by seeing to it that none of the fish, particularly the large and cannibalistically eager variety, are ever without plenty of food. To do this takes many daily feedings, and the meals are served—to the large fish such as shark, tarpon, etc.—by divers who enter the tanks and personally hand out the grub.

There is naturally danger involved in the feeding of some of the more man-eating species, but there have never been any casualties among the diving costumed "waiters underwater." They are constantly on the alert, just in case some nasty shark might decide he didn't like the fare being offered and would much prefer human flesh instead. In cases such as this, the divers can pop to the safety of the top of the tank in an instant.

Even more dangerous is the job of tending to newly captured man-eating fish immediately after arrival. With some of these fish, such as a barracuda, it is necessary to stun the creatures with a hypo before transporting them to Marineland. To the diver who goes down to tend to the newly arrived and very indignant shark, there is the decided danger that—although the killer may apparently be still drugged—there is the chance of a sudden, angry, unexpected awakening.

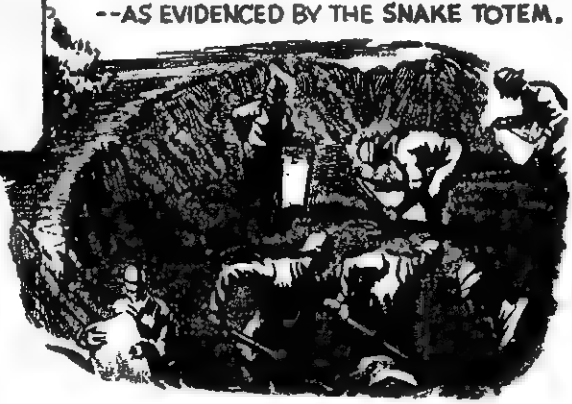
But the head curator of Marineland, and the men who make this aquatic wonderland possible, take such dangers in their stride. They enjoy their jobs tremendously—and the thousands who come to view and marvel before this underwater sideshow are duly appreciative of the efforts which made and maintain it. If you're ever around, drop in. But not literally.

# Scientific

VOTAN, OR AS HE IS SOMETIMES CALLED, ODIN, or WOTAN, IS THE MOST MYSTERIOUS FIGURE IN MYTHOLOGY and in ANCIENT HISTORY. TO MANY RACES HE IS A GOD; TO OTHERS A MAN.

THOMAS CARLISLE WAS THE FIRST TO RECOGNIZE—THE CONNECTION BETWEEN THE MYTHS and LEGENDS and TOTEMS OF MANY RACES. THE WHOLE ANCIENT WORLD, IT SEEMS, KNEW VOTAN'S GREATNESS.

THE SNAKE SYMBOLIZES RAIN, WATER, OR THE SEA. EGYPTIANS REVERED THE SNAKE AS DID THE ANCIENT AMERICAN INDIAN --AS EVIDENCED BY THE SNAKE TOTEM.



ARCHAEOLOGISTS ARE DIGGING UP ANCIENT CLAY TABLETS IN INDIA WHICH MAY THROW NEW LIGHT ON THE MYSTERY OF VOTAN. WHO WAS THIS MAN WHOM SO MANY RACES KNEW, THE WORLD OVER?

# Mysteries

## VOTAN, THE CLEVER BUILDER

### By L. TAYLOR HANSEN

**Who was Votan? Was he god or man? Did he build the great cities that now excite archaeologists exploring their ruins?**

SOMEDAY an ethnologist will write a volume upon one of the greatest figures in the Iranian world. It will not be the first one. Carlisle wrote that, but he wrote it several generations ago, and his volume is out of date. For since that time, science is becoming increasingly suspicious that the hero of Carlisle's book wielded a power and influence over mankind, which Carlisle in his wildest dreams could not possibly suspect.

Much material which would throw unexpected light upon the figure of Votan may yet be found; and much that has been found needs only the patient labors of the archaeologist and ethnologist to gather up and correlate. Or perhaps, as information pours in from clay tablets dug up under forgotten cities of early India or Sumeria*; from the dune-buried palaces in former "Edens" which are now the African and Arabian deserts; or from those massive-walled cities whose ruins now lie in the jungles of Brazil or the heights of the Andes, this volume will have to be revised again and again.

Most of these sources are quite safe, awaiting only the proper spade of the trained archaeologist to yield their secrets. However, there is one source, perhaps the richest of all, which in our own time is daily fading away, and whose unread pages in another generation will be forever closed. That source is the collection of old legends which are stored in the minds of living Indians. The aged story-tellers are no longer imparting their knowledge to their unbelieving and uninterested grandsons. Nor can the presumptuous scientist carry on where the youth of the red men have failed. Too many important fragments and connecting legends are passing because the present owner has chosen to wrap himself in a disdainful and bitter silence. It is true that a few scientists have brilliantly succeeded, the most immortal of which are the efforts of Fewkes with the Hopi and Cushing with the Zuni. Their secret was, of course, that they put on the blanket and became, to all intents and purposes, for the time being, entirely Indian. How can such efforts help the progress of science, you ask? Let us return to Votan and we shall see.

CARLISLE was not only the first modern to recognize the greatness of Wotan the man, but was also the first to point out the relationship of fact to myth and legend. It seems to be a universal law that as time recedes, a great leader ascends from fact to legend and thence into the hierarchy of the gods. As an illustration, Carlisle pointed to the figure of Wodin (sometimes called Odin or Wotan), the Norse god known as the "Great Artificer" from whom we have inherited Woden's day or Wednesday.

In the Gothic English of "Heroes and Hero-worship," Carlisle has enshrined forever that figure which, through the midst of the dawn, falls athwart the threshold of Northern Europe. Doubtless, as he wrote, the English master of sonorous phrases felt a wave of satisfaction at the thought that he was saving from the limbo of forgotten shades something of his hero's fast-fading shadow. But imagine his astonishment, if he could return today and see how that shadow has lengthened because of new lights from Indian legends over the Atlantic!

In the legendary history of the Americas, the name of Votan is very prominent in the Popul Vuh. As most students of American culture know, the Popul Vuh is one of the only surviving books of pre-conquest time. In a way, it is inaccurate to say that it survived. It was cast unread, into the flames, along with thousands of works upon art, science, literature, drama and a history of unknown antiquity. We can thank this orgy of fanaticism* for the loss to the world of what were probably its oldest books. One Indian sage, realizing the stupidity of his conquerors, and being unable to hide his precious manuscript, wrote down in the white man's language what he could remember from its pages. And so we have the Popul Vuh, a half-mythical story of an enormous invasion by conquering armies, and the subsequent

*Chiera—They wrote on clay.—Ed.*

*Bishop Landa was the main offender.—Ed.*

fall of the powerful and luxurious Xibalban Empire. In this evident clash of races, civilizations and religions, as seen through the shrouding mists of time, the older one was found by Votan of the Snake Totem. He had been deified for many centuries with complicated rituals when, at the fall of magnificent Xibalba, his worship was overthrown and the population converted to the religion of Hurukane. (The story of this deified leader who swept in from the west, is another volume to be written in the future.)

The early epoch of Votan and the fact that he belonged to the Snake Totem are both of help in tracing and sorting out the unwritten fragments. (The snake, as we might guess from its color and its undulating movement, always stands for either rain, water, or the sea.) These unwritten connecting legends are sometimes astoundingly enlightening. Most of them are mere fragments. Many are garbled, while others have been attached to an unrelated fragment. Important parts are sometimes missing altogether, or two personalities have become confused. However, taken in mass, they begin to present a pattern—a much-torn puzzle-picture—and from it begins to emerge the story of Votan.

One of the most interesting and significant facts is that the greatest majority of these legends come from the Atlantic coastline. Not only are these stories more complete along the coast, but they are garbled in ratio to their distance from that coast, which fact should distinguish Votan as an exclusively Atlantic figure.

OUR most complete unwritten legend comes from the Chiapas Tribe. Votan, we are told, lived at the time of the great flood. He was known as "The Great Builder" because he began the pyramid which was to reach to heaven. Of course, he was unable to finish it because of the flood. When the sea began to rise in mountainous waves, Votan gathered what remained of his people and hurriedly crowding them upon a fleet of ships, sailed toward the setting sun until he came to this continent. It had been an orderly exodus, however, for he remembered to take not only food and water, but domestic plants, animals, cotton seeds and the entire library of his doomed homeland. With him were seven Totems, the priests of the sun-god, as well as historians and actors skilled in interpreting and dramatizing the priceless manuscripts. The first tribe or totem was put ashore at a place variously called Panutla, Panuco or Pantlan. The distant ancestors of the Chiapas were put ashore at a later stop and the fleet continued upon its journey toward the south.

We pick up the second most important Votan legend in Guatemala. Here the story is essentially the same, except for a minor controversy concerning the identity of Votan, the leader. Some believe that "The Clever Builder" was drowned in the flood and that his grandson led the fleet of refugees. Be that as it may, the fleet came carefully down the coast. It dropped another tribe in Guatemala, and after leaving elaborate directions for a system of communication, the remaining tribes continued south, carrying with them their priceless books. From this point the mists of time close about the fleet of Votan. If there are more legends in the jungles of Brazil, no one has ever gathered them. Dare we hope that not only legends exist, but in those tropical mazes where white men (fortunately) have never been able to penetrate, some of the ancient manuscripts may yet be discovered?

Now it remains to us to see what we can add to this outline by fragments. There are many fragments. The Cholulas tell us that they have a legend of Wodon. He began a pyramid which he was unable to finish because the mountains belched forth flaming rocks. After this happened, the people could not understand each other. The Mayas have a legend of Itzamna or Itzamnan. He was the god of the Itzaes who came to Yucatan from the south and settled among the Mayas. Itzamna has taken some of the Votan tradition. He is pictured on the Mayan temples and upon a surviving manuscript as sailing over the sea, carrying plants. It is interesting to note, however, that he is always pictured with a tiny goatee beard—such a beard as archaeologists tell us was once a part of the face of the wind-cut sphinx, and which was as much a part of the costume of the beardless Egyptian pharoahs as were their golden symbols of office.

Other legendary fragments such as that of the Hopis, lend no new feature to our picture. Yet I cannot help but quote from a shrewd old Mohawk story-teller who, when pressed by the present writer for a story, announced that the Tower of Babel was really an Indian legend which the biblical writer had decidedly garbled. The true facts were, he assured me, that the people were unable to finish the tower because they were interrupted by a violent earthquake and a flood which rose out of the sea. The people having been dispersed, planned to meet at a future date, but when they came together, they could no longer understand each other's language. Dare I say that I found his explanation the most reasonable?

Perhaps the most unexpected revelation of these legends is that of the myth of Vulcan, which comes from southern Europe, is seen to be another fragment of Votan lore. He, too, was an artisan. From that source also, the language is bequeathed a word, and one which in Indian eyes is far more appropriate, namely—volcano.

WILL science someday find a connecting link between the Tower of Babel, the Norse god Wotan and the Great Flood? It becomes plausible if we admit that in a legendary Atlantis, the work of the last great emperor upon his pyramid-temple was interrupted by the cataclysmic fury and subsequent tidal waves which heralded that

island's doom. In that light, many other facts take on new significance. Atli, son of Wotan by a snake mother, has a serpent's den wherein he throws his enemies. His sister gives away "sun necklace." The most ancient Norse meaning of "Odin" is "water" or "rain." The pharoahs of Egypt wear a snake head in their crown, apparently coming from the forehead. The Aztecs tell us that "atl" means water to them. The strands of interlinking evidence are strangely suggestive, and far too numerous to list here.

However, if we deny the explanation of a lost homeland in the Atlantic, and argue that the pyramid building, sun-worshipping Snake Totem did not flee to the four corners of that ocean in their long, slender, square-sailed ships; and insist that the discovery of their giant stone walls and terraced hillsides in such widely separated parts of the world as Holland, Greece, Central America, England and Peru is just an accident; how are we going to explain the fact that in languages which time and invasion have so altered that they no longer have any words in common, the name of Votan, Wotan or Vulcan is always connected with that descriptive phrase—"The Clever Builder"?

*REFERENCES*

*Gann, Thos. — Ancient Cities and Modern Tribes.*

*Massingham—Downland Man.*

*Perry, W. J.—Children of the Sun*

*Smith, G. Elliot—Migrations of Early Culture; Chiera, They Wrote on Clay (1939).*

*Squier, E. G.—American Archaeological Researches.*

*Bancroft—Native Races (Scattered legends); The Popul Vuh.*

*The Elder Vedda. (Translation of ancient Norse sagas.) Ancient Roman Mythology.*

## « « ODD SCIENCE FACTS » »

### DIZZYING DIGITS

IT IS ironic that we have become so enlightened as to be able to measure the invisible, farflung reaches of trackless space, and still remain so earth-bound both physically and mentally as to be unable to really understand what the distances mean. For the human mind has no means of comparison by which to judge or evaluate the bewildering, seemingly fabulous distances involved in astronomical measurements.

Take for instance the statement recently made by Harvard astronomers that their tests show the lateral bounds of the universe to exceed forty thousand parsecs.

But what, you may ask, is a parsec?

A science fiction fan or an astronomer would answer that a parsec is a name derived from jamming together the term, "parallax second," and means that the distance which the parallax (or apparent shift of position of a star as viewed from opposite sides of the earth's orbit) is one second of arc.

In figures this is something less than two million million miles; approximately 206,263 times the distance of the earth from the sun. And 400,000 times that gives you the latest approximation of the size of our universe.

A more familiar method of measurement is by light years. As light travels over 180,000 miles a second it covers quite a bit of ground in a year. About five million million miles. Yet the light from the closest star is four and a half years in transit, and the light from the last discovered star cluster, from which the observation of the size of the universe was made, was from 50,000 to 100,000 years in arriving.

So that makes the size of universe about two quintillions of miles laterally. Of course that doesn't allow for shrinking. A few inches might have been lost that way somewhere along the line.

### HOT DAM!

IN THE construction of the six million-ton Boulder Dam the engineers found it necessary to build more than five hundred miles of tubing into the structure, through which ice water circulates from a plant capable of turning out a thousand tons of ice a day. It was necessary to do this to hasten the cooling of the thousands of tons of concrete poured into the dam. If left alone it would have taken more than a hundred years for the dam to cool!

"Do you think I am fool enough to believe you have traveled backward in Time? Where's your proof?"

# The Man Who Wasn't Himself

**by ALEXANDER BLADE**

***An absolutely sure way to implicate another man in a murder is to commit it with his own body! And Jaques Perdeau knew such a way!***

IN HIS laboratory that night Jacques Perdeau had to congratulate himself on his cunning. The scheme was clever. It was worthy of Perdeau, the dark, dapper, wax-moustached little scientist.

In addition to this, it was exquisitely ironic. For it would eliminate the man who stood between Jacques Perdeau and the hour in which he could safely announce his discovery. It would eliminate Mortain.

The thought of the bestial, bettle-browed thug brought a smile. For Perdeau was visualizing the stark, bewildered fear that would grip Mortain's drink-fogged senses when the gendarmes came to arrest the thick-witted swine for murder. A murder he never would have committed—in actuality.

It would be a murder committed only by Mortain's body—

Perdeau lit a cigarette and seated himself at his laboratory desk. In a moment he was busy pouring over a thick ledger of charts and findings from the important experiment. On the front of the ledger which the dapper little scientist paged was scrawled, "Final Investigations in Personality Transference."

The experiments had been completed for over a month now. Completed and definitely proven. Now they were ready for scientific investigation by the Academy in open hearing. Fame, wealth, and great honor waited for Perdeau the moment his findings were submitted to the Academy. And all these would already have been Perdeau's a month ago, except for the fact that Mortain had entered the scene then.

It had been an evening during the final week of Perdeau's experiments. Mortain was in the library of the dapper scientist's apartment when Perdeau returned from his laboratory. . . .

"GOOD evening, *mon ami!*" Mortain sat in an easy chair, a bottle of Perdeau's best whisky and a carton of his expensive cigarettes at his elbow. His face was hidden in the half-darkness —for there was only one light in the room—but the hulking bulk of his great body and the rasping harshness of his voice identified him instantly.

Perdeau fought for control, and with a hand that trembled more than slightly, found the wall switch and flooded the room with light. It was a moment before his vocal cords would act to the

Jacques Perdeau gloated over the unconscious Mortain before he turned to his machine

bidding of his terror-numbed mind.

"Mortain!" he choked at last. "Mon dieu! What are you doing here? How—that is," he faltered. "Have you come from Hell?"

Huge, ape-like, with a face that was at once foul and ugly, Mortain rose, grinning mockingly from the easy chair.

"I have come a long way, friend Perdeau, a very long way. I have searched a year to find you. Remember, I swore I would find you some day?"

Perdeau said nothing, his mouth suddenly too dry to speak.

"You thought me dead, eh, Perdeau?" Mortain continued. "You thought me dead on the Island of the Devil."

Perdeau gazed at him with the fascination of a rabbit for a coiling snake.

"But I did not die," Mortain said. "I lived; even after my release from that living hell of a prison, even as I served out an equal number of years as a libré, half-starving in the native filth. I lived on—knowing that someday I would find you."

Perdeau spoke at last, his voice a croak.

"What, what is it you seek from me, Mortain?"

Mortain smiled, relishing the other's fear.

"I am not certain as yet. I could kill you. Perhaps I shall. Certainly I should. But another idea had been in my mind. You have wealth and luxury. To one who has lived in hell as I have for those years, wealth and luxury are very tempting."

Perdeau sighed half audibly, the tight lines at the corners of his mouth relaxing somewhat.

"If it is money you want, I will give you plenty of it. But you must promise to go far away."

And then Mortain laughed; deep, bellowing, bullish. His voice was as harsh as the scraping of a saw on stone.

"If I promise to go far away," he mocked. "If I promise to go far away!"

Perdeau again grew pale.

"You cannot stay here!"

Mortain turned back to the bottle of Perdeau's finest whisky. He lifted it to his lips, scorning a tumbler, and drank deeply. He put it down, smacking his lips in satisfaction. He wiped his sleeve across his thick wet lips.

"I'm staying here," he declared. "I'm staying here as long as it pleases me."

PERDEAU edged back to a wall desk, and suddenly his hand darted into a drawer of the desk, jerking forth an automatic pistol which he trained instantly on Mortain.

"You are not staying," Perdeau said softly. "You are an intruder; for all anyone would know, a thief. I can kill you now. Your record on Devil's Island would bear out my story."

Mortain grinned twistedly.

"You think I am completely thick-witted, eh? You think I would come here without protecting myself from a threat such as this?"

"You are a fool," Perdeau's hand was steady on the automatic. "You are a fool and I am going to kill you."

Mortain's words came fast.

"A moment, consider! I have left papers with a certain priest. Papers that tell everything about you, about your past. I have left words that those papers be opened should anything happen to me. The priest knows that I have come here. If you want to feel the guillotine snicking off your stupid skull—" he left his sentence dangling meaningly, pig eyes gleaming as he saw fear returning to Perdeau's face.

"Do you think I believe that?" Perdeau said. But he lowered the gun slightly.

"You can hardly afford *not* to believe

it," Mortain sneered.

Perdeau slipped the automatic into his pocket. The gesture signified his acceptance of defeat.

Mortain smiled.

"You are being sensible. Now, let us get down to practical matters. I will need clothes to replace these rags of mine, and money, and—" Mortain went on, listing his needs, and his demands. His pig eyes shone with delight as he savored the discomfort of the man who was to be his unwilling host.

And Perdeau had been forced to comply. Blackmail though it was, he couldn't risk the chance of his unwholesome past coming to light. Not now . . . .

REMEMBERING those weeks in which he'd been forced to shelter the hulking Mortain, Perdeau was able to smile now as he flicked past another page in his thick laboratory ledger. For tonight, this very evening, was going to be the turning point. Tonight he would have his revenge against the undesirable Mortain. Tonight he would eliminate Mortain's unhealthy knowledge, and Mortain, for good.

For in these past five weeks—weeks in which he'd silently endured the gloating heel of Mortain—Perdeau had carefully made plans. He'd watched Mortain almost constantly, shadowing him on his visits to the cafès, where the hulking creature invariably got riotously drunk and squandered the funds squeezed from Perdeau.

And on two occasions Perdeau had followed Mortain to a certain church. There the thick-witted blackmailer conversed for short periods with an old priest. This was obviously the priest to whom Mortain had given the sealed, damning documents about Perdeau. Perdeau carefully noted the address of this church and learned the name of the old priest. Both factors would be necessary—as would Mortain's heavy drinking—in the completion of the dapper little scientist's plans.

And finally, when his scheme was perfected, Perdeau had waited for the opportune moment to put it into effect. The moment which presented itself most opportunely this very evening. Jacques Perdeau smiled and closed his ledger, thinking of Mortain's drunken entrance to the apartment less than three hours ago. . . .

MORTAIN was very drunk. His eyes were red and puffed and he swayed from side to side as he stood there in the door when Perdeau opened it for him.

"My fine frien' I have come for more money!" Mortain bellowed. "I mus' return to the cafès, where a wench awaits me!" He laughed drunkenly. Perdeau noted carefully that this was the highest point of intoxication at which he'd ever seen Mortain, and realized that another bottle of brandy would befog the ape-like blackmailer utterly, resulting finally in senseless slumber.

Perdeau found a bottle.

"Stay a moment," he told Mortain, "and have a drink with me."

Mortain slouched heavily down on a divan. He blinked at the moustached little Perdeau owlishly.

*"Voila!"* he toasted, taking the full tumbler of brandy handed to him. "Even though you killed three helpless women in your wretched past, Perdeau, you are not a bad fellow at times. Drink with me, Perdeau!"

Perdeau smiled, knowing that no one was within earshot of the drunkard's babbling reference to his past.

"You drink first, Mortain," he invited silkily, "while I go to get another glass."

Mortain drank, deeply, gluttonously,

while the liquor spilled out the sides of his glass and trickled down his unshaven chin and onto the expensively tailored suit Perdeau's money had purchased.

When Perdeau returned to the room with a small glass for himself he smiled. Mortain was s n o r i n g drunkenly, stretched out on the divan. The bottle showed Perdeau that his blackmailer had finished off a few more in the few moments he'd been out of the room. It was sooner than Perdeau had hoped for. But so much the better. Past experience in watching Mortain had enabled the scientist to judge that the hulking lout would be unconscious for fully ten hours now.

Somehow, Perdeau managed to lift Mortain from the divan. And somehow he managed to carry him down the rear stairs of the apartment and into the alley. And unobserved, he finally managed to bring the body of Mortain to the laboratory . . .

NOW Perdeau moved across the laboratory. In the far corner was a casketlike affair beneath a series of webbed lights and wires.

Mortain, snoring drunkenly and still deeply under the influence of the brandy, lay inertly in that wired casket.

Perdeau stood over the thick-featured blackmailer for a moment, grinning in gnome-like triumph. Then he picked up the headpiece apparatus lying beside the front of the casket. The plate of the headpiece was attached to wires which led to the battery of lights above the body of Mortain. Perdeau carefully placed the headpiece on his own brow, and producing a similar headpiece fastened it over the thick skull of Mortain.

Unsmiling now, Perdeau turned to a control lever at the side of the casket and threw the switch full on. Wires hummed, and the lights above the casket flickered ghostily in the semi-darkness of the little laboratory. Perdeau's expression was changing. Slowly at first, then more rapidly. He seemed to reel, almost drunkenly.

Mortain's snoring was diminishing. Perdeau's eyes were closing. Suddenly the snoring was issuing from Perdeau's lips!

Perdeau slumped senseless to the floor.

The wires continued to hum. The lights flickered only intermittently now. But something was happening to the figure in the casket. It was rising, slowly, surely!

The body of Mortain sat upright in the casket, eyes slowly opening. Looking over the side of the casket, Mortain's body perceived Perdeau's inert form slumped along the side. Mortain's mouth grinned goulishly.

The switch had been accomplished. Jacques Perdeau now inhabited the body of Mortain. The drink-fogged mind of Mortain snored onward in the body of the dapper Jacques Perdeau lying senselessly on the floor!*

Perdeau—in Mortain's body—reached out and switched off the lever. The wires stopped humming and the lights ceased flickering. Perdeau removed the headplate from his new body, climbing from the casket as he did so.

There was a mirror in another corner of the laboratory, and Perdeau stepped around his own body and walked clumsily over to it. He looked

*Whatever means Perdeau used to transfer the mind of Mortain to his own skull, and his own mind to that of Mortain (possibly a molecular transference of matter after breaking it down into energy and reassembling it), the alcoholic content of Mortain's brain, which was also transferred, caused the body of Perdeau to succumb to an apparent drunkenness, even though no alcohol was present in the body. And similarly, although Mortain's body was saturated with the poison, Perdeau's mind was not, and though he might experience some effects after the blood began to circulate, he would not become drunk.—Ed.

into the glass for an instant, involuntary shivers running down his spine as he gazed at the reflection that was now Jacques Perdeau.

Mortain's ugly features suddenly twisted in a smirk as Perdeau laughed.

"You are certainly an ugly fellow in your new garb, Jacques," Perdeau told the mirror. And then he laughed again, and in his clumsy body moved to the door of the laboratory. For a moment he paused there, before switching off the lights, looking at his own body still lying drunkenly on the floor.

"Patience," Perdeau smirked. "I shall be back in you before long."

HE SHUT the laboratory door behind him, then, and locking it securely he made his way into the street.

Twenty minutes later Perdeau, now growing accustomed to his new body, entered a pawnshop.

"I want a gun," he told the silk-capped little proprietor who shuffled toward him. His voice, he was pleased to note, was just as Mortain's had been, rasping and harsh.

Perdeau made a point of standing beneath the brightest lights in the pawnshop while he inspected the revolvers the dealer brought to him. He wanted the little proprietor to have every chance in the world of identifying him. He had to smile at this thought. As though anyone might forget the face and voice of Mortain!

Ten minutes later, Perdeau emerged from the pawnshop with a gun in his pocket. He turned his steps immediately toward the church to which he had trailed Mortain on those two occasions. It was not a long walk before he reached it.

"Father," Perdeau said at the door to the rectory, "I have come to get back those papers I entrusted to your care."

The priest, the same he had seen talking to Mortain, seemed surprised. Shaking his gray head he said kindly:

"Certainly, my son. Though I must say you have made some odd requests from me during the past weeks. You may have your papers. Wait, please."

Perdeau waited while the priest disappeared into the rectory. After a moment he returned. In his hand was a sheaf of dirty, sealed envelopes. Perdeau focused Mortain's eyes suspiciously on the priest.

"These have not been tampered with?" he demanded.

The priest registered injured kindliness.

"Certainly not," he said. "I know no more of what is in them, than at the very moment you gave them to me. Whatever secrets they may contain are still inviolate."

"I had to make sure," Perdeau said, giving the priest one of Mortain's twisted apologetic smiles. "They are of much value."

IN AN alley five minutes later, Perdeau tore open the dirty envelopes. There were four of them. His face, as he read the contents, tightened with rage. Mortain hadn't been lying. In these papers he hadn't left a thing about the unwholesome aspects of Perdeau's past untold. It was a crude, damning record of the past crimes of Jacques Perdeau, painstakingly compiled. The papers even told of Mortain's minor part in the crimes, and of the misdirected sentence imposed on Mortain after he had been convicted of Perdeau's major part in them.

"These," Perdeau muttered, "would have made interesting reading for the police." He fished into Mortain's pockets and found matches. Seconds later the last fragments of the papers curled in flame at his feet.

Perdeau ground the ashes of the papers into the alley mud and stepped out into the streets once more. Now he was grinning broadly. With the evidence gone he was much safer. He could even go back to the laboratory right now and resume his own body. Then he could safely slay Mortain.

But no. That was too simple, and not in line with the cunning incredibly ironic scheme he had worked out. Perdeau touched the gun in his pocket and grinned.

He had figured out the logical person to kill. A person who could be slain unobserved. That would give Perdeau time to get back to the laboratory after the murder and after planting evidences of Mortain's person about the scene of the crime—and resume his own body. Perdeau intended also to be identified by some one as he was leaving the scene of the murder. Then, in the morning, the police would appear looking for the culprit Mortain.

There was a little cobbler who worked late in his shop every night. Perdeau had watched him for two weeks now, while perfecting his plan. The cobbler's wife stayed with him in the back of the small shop. It would be simple, beautifully simple.

Perdeau was now less than a few blocks from the cobbler's place. And nearing the outskirts of the city cafe section, on the way to the shop, Perdeau reeled a little. The alcohol in Mortain's body—It drew attention from those who sat drinking at the sidewalk tables. Perdeau grinned Everything helped. Even these people might recall having seen Mortain within a few blocks of the cobbler's shop.

Perdeau paid no attention to the feminine voice squealing behind him. No attention, that is, until the cry was repeated less than two feet from his ear and a pair of fat arms encircled him playfully from behind.

*"Cheri! Cheri!"*

Then a grotesquely painted face was leering close to his, and the tawdry slattern who'd embraced him was speaking.

*"Cheri,* you have come back! What kept you so long, my loved one?"

Perdeau felt a wave of nausea engulfing him as she planted a cognac-reeking kiss on his lips. While he struggled to free himself from her fat, python-like arms he realized that this must be the wench Mortain had mentioned before falling drunkenly asleep in his apartment. This, then, must be the cafe at which Mortain had been drinking.

Perdeau managed at last to free himself from the embrace. Holding the slattern at arm's length, he managed to catch his breath. This was bad. Mortain's tastes were not those of Perdeau, even though Perdeau happened to be inhabiting his body at the moment.

Then, in spite of the revulsion he felt toward the painted creature, Perdeau had to smile. For this was luck. This was perfect. He could drink with the trollop for perhaps an hour. And during his drinking he could show the wench the gun he carried, boast of what he planned to do to the cobbler, and thus create a first rate witness for Mortain's murder trial.

GRINNING, Perdeau led the red-mouthed slattern to a seat at one of the sidewalk tables. Sitting down, he called loudly for brandy. Then, as he talked rapidly to the wench, Perdeau pretended to indulge in heavy drinking. But he only pretended, for he would need a clear head this evening. On every chance he got, Perdeau managed to get rid of his brandy by the simple expedient of spilling it inconspicuously on the sidewalk. Now and then he

tipped far back in his chair and laughed uproariously, attracting attention from the others at adjoining tables.

Perdeau talked loudly, wildly. But occasionally he would lower his voice to a whisper as he covertly displayed the gun he carried and boasted of the extra money for brandy he would soon obtain.

And as the hour drew to an end, Perdeau had another idea. An idea that would even further insure Mortain's meeting with the guillotine. He rose, pushing his chair over with a clatter.

"I mus' go!" he announced loudly, drunkenly.

"No, no, *Cheri!*" the slattern shrilled, rising to detain him.

"I have other women to see, pig," Perdeau snarled. "Other women much prettier than you!" He made his voice purposely loud. It was with satisfaction that he heard the sniggers from the tables near to them.

The slattern's red face grew lobster red, then death white in swift rage. She stood there, splutteringly searching for words.

"Other and prettier women, pig!" Perdeau repeated loudly. Then he wheeled, staggering away from the cafe and down the street. Behind him he could hear the shrill cries of rage and indignation from the red-mouthed trollop. It was perfect. There was now a woman scorned to confront Mortain at his trial.

The streets were darker and less clearly lighted as Perdeau moved on to the little cobbler's shop. They were also, he noted with satisfaction, almost completely deserted.

At length he turned down a narrow little side street and found himself in front of the tiny shop he sought. A glance through the window showed Perdeau that the bent, white-haired little cobbler was hard at work in the front of his store. His wife was probably in the back. Perdeau stepped around to the door and pushed against it. It was locked. Perdeau pounded on the window pane and the old man looked up from his work.

The old cobbler came around to the door and opened it, peering out at Perdeau.

"Is there something I can do for you?" he asked.

Perdeau shoved roughly past him and into the shop. He had brought forth his revolver, and now he waved it at the frightened old fellow.

"You can give me all your money," he rasped, "and quickly!"

The old man's face was a white mask of terror.

"I have nothing," he quavered, "nothing at all. I swear I have nothing. Please!"

Perdeau heard someone stirring in the back of the shop. The old man's wife would be bustling out in a moment. He stepped under the clear bald illumination of the central light in the store.

"Then you can take this, as a present, from me!" he snarled.

His revolver barked four times in the silence. The old man rose on his toes, clutching at his chest, then pitched forward dead.

THE old woman entered from the rear of the store in time to see her husband topple to the floor. She screamed in terror, gazing in stark horror at Perdeau, and Mortain's features. Then she was babbling in frenzied grief, sobbing wildly and trying to roll her husband over on his back. Perdeau laughed wildly.

"There, old woman. When you meet him in the hereafter, tell him not to hold out on people—especially Mortain!" She would recall that name later, even though it scarcely registered now,

Perdeau knew. For perhaps twenty seconds longer, Perdeau remained under the bald illumination of the single lamp light, then he turned and dashed out of the shop and into the narrow street.

Now to the laboratory.

Perdeau knew, even as he took to the darkened alleys as he sought his way back to the laboratory, that he couldn't have carried out the scheme with more cunning perfection. And he smiled savagely, thinking of Mortain's bewilderment when morning would come.

His own story would be simple, convincing. Yes, he had known Mortain. Had known the poor fellow long ago. That was why he had given him clothing and shelter these past weeks. Mortain had been seeking work of some kind. Until he got it Perdeau was taking pity on him. No one would question the story of a reputable scientist. No one would think to take Mortain's word against his own—now that those damning papers were destroyed.

In the darkness of the alley, Perdeau heard the first sound of chase. A police siren wailed far in the distance, somewhere in the vicinity of the cobbler's shop. The noose of evidence was rapidly closing around Mortain's thick neck.

Perdeau smiled and hastened onward. It was so clever, so ironic. He quickened his pace still further. There might not be a great deal of time in which to make the change back to his own body. Ten minutes later he arrived in front of the old loft building in which he had his laboratory.

Perdeau stopped suddenly. Something was wrong here. A crowd was gathered in front of the building!

Cars were pulled up in front of the laboratory doors; the black cars of the police!

Perdeau was at the fringe of the crowd, and now he stood beside an old man. Perdeau grabbed the old man suddenly by the arm.

"What is this?" he demanded. "What has happened here, old fellow?"

"It is in the laboratory," the old man said.

Perdeau gritted his teeth in anger at the old fellow's stupidity.

"Go on, what happened?" He shook the old man's arm roughly.

"The scientist, Jacques Perdeau," the old man said, "was found by a watchman locked inside the laboratory. Perdeau's frantic pounding on the doors attracted the watchman. When the watchman opened the door he found Perdeau frothing at the mouth and gibbering madly. The man was utterly insane!"

PERDEAU listened as the old man rambled on. Listened while cold fingers of terror squeezed in on his heart.

"Perdeau was screaming wildly that he was not Perdeau," the old fellow said, shaking his head in pity. "He insisted that he was someone else, and that Perdeau had stolen his body! It was terrible, monsieur. Mad, you understand? Utterly imbecilic. He grabbed a gun from the watchman, then, and before he could be stopped, Jacques Perdeau turned the gun on himself and blew his brains out!" The old man made a face of horror. "They just called the police to take the body away." He sighed. "It is a pity, these men of genius work too hard. I have heard of it before. There was a—"

But Jacques Perdeau had wheeled sickly away from the old man. He staggered drunkenly, dazedly away from the glare of the streetlights. He stood there near an alley, a safe dis-

*(Concluded on page 146)*

# DISCUSSIONS

AMAZING STORIES will publish in each issue a selection of letters from readers. Everybody is welcome to contribute. Bouquets and brickbats will have an equal chance. Inter-reader correspondence and controversy will be encouraged through this department. Get in with the gang and have your say.

## "BEST SO FAR"

Sirs:

Ayre and Steber's "Mystery of the Martian Pendulum" is one of the best S. F. stories I've read so far

STAN MARCUS,
2814 West 15th Street,
Brooklyn, N. Y.

*Them's kind words, Stan. We'll try to get more of the same from these writers—Ed.*

## AROUSED

Sirs:

Following was aroused by the October issue of AMAZING STORIES:

Feelings—

Got a terrific kick from the cover as I saw a St. John painting and stories by Burroughs and Reed.

Opinion—

After thoroughly digesting the mag, I was a little disappointed in Reed's "World of Miracles." Burroughs' yarn was tops, with "Mystery of the Martian Pendulum," giving it a close race.

Disappointment—

Sorry because John Carter is leaving A. S.

Request—

Want more time yarns.

Suggestion—

I would like to start a series of original paintings of future space ships starting with 1970, and spacing them ten years apart, thus showing the great changes in rocket designing, one to an issue.

PATRICK FESTA,
1126 60th Street,
Brooklyn, N. Y.

*There's a time yarn in this issue.*

## NO STRAIGHT INTERPLANETARY ISSUE

Sirs:

Thanks a lot for the swell series on "John Carter of Helium," although the last one was a bit of a letdown toward the end. Have never read any of the Pellucidar stories, and am anxiously awaiting their inception.

That "Mystery of the Martian Pendulum" was a wonderful study in human emotions and you can compliment both its authors for getting a really marvelous piece of science fiction into print.

The others were just fair. One more thing. Please! *No straight interplanetary issue!*

ABRAHAM RADDEN,
1541—55th St.,
Brooklyn, N. Y.

*What is this, an invasion from Brooklyn? Every letter your editor picks up is from the city of the Dodgers—the amazing battlers who once weren't "in the league." -Ed*

## FROM DOWN UNDER

Sirs:

We cannot always get the most recent issues here in the Union. The latest issue that I have is April, 1941. When a new shipment of books comes in, I always watch out for AMAZING STORIES. Your illustrations of cities on various planets are very interesting and I am sure they are appreciated by readers of science fiction. My rating of your April issue is as follows:—

1. King Arthur's Knight in a Yankee Court.
2. Killer's Turnabout.
3. Priestess of the Sleeping Death.
4. Big Man.
5. Lords of the Underworld.
6. Invisible Raiders of Venus

Alfred de Villiers Austin,
178 High Level Road,
Three Anchor Bay,
Cape Town,
Union of South Africa.

*We're glad to hear that you manage to get our magazine so far away from America, even if it is late, and more glad to know that you like it. We'll have many more of Paul's fine paintings of other-world cities.—Ed.*

## WOMEN? CERTAINLY!

Sirs:

I want to state here and now, that I agree with Roger Sklar that "The Liquid Man" was one of the best novels that I have read in a long time.

One fact really puzzled me when I read your readers' page, and that was that none of them were from women. What's the matter with them? Haven't they any imaginations. Or won't they

## Spare Time Training *that helps you*

# SERVE and PROSPER

## *in this national crisis*

YOU want to serve your fullest in this Defense situation, do your utmost to help our nation. You want also to advance yourself in position and pay —win promotion and more money.

You can do both at the same time.

Our nation needs many more men for specialized and supervisory positions—to help defense production and business growth. Thousands—scores of thousands—must fit themselves quickly for these better paying jobs in offices and stores and factories. They must train as accountants, salesmen, managers, foremen, traffic managers, general foremen, office managers, inspectors, etc.

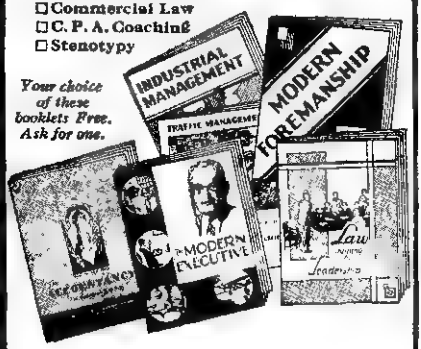
If you wish this advantage, simply mark on the coupon the field of business in which you are most interested. We will send you full information about the opportunities in that field, tell you how our complete success-building program helps you plan your future, trains you in your spare time, and works with you all through your career. Send the coupon NOW.

**LASALLE EXTENSION UNIVERSITY**
***A Correspondence Institution***
**Dept. 1175-R CHICAGO**

Please send me full information regarding the success-building training and service I have marked with an X below.

- ☐ **Business Management:** Training for Official, Managerial, Sales and Departmental Executive positions.
- ☐ **Modern Salesmanship:** Training for position as Sales Executive, Salesman, Trainer, Sales Promotion Manager, and all positions in retail, wholesale or specialty selling.
- ☐ **Higher Accountancy:** Training for position as Auditor, Comptroller, Certified Public Accountant, Cost Accountant, etc.
- ☐ **Traffic Management:** Training for position as Railroad, Truck or Industrial Traffic Manager, Rate Expert, Freight Solicitor, etc.
- ☐ **Law:** LL. B. Degree.
- ☐ **Modern Foremanship:** Training for positions in Shop Management, such as that of Superintendent, General Foreman, Foreman, Sub-Foreman, etc.
- ☐ **Industrial Management:** Training for Works Management, Production Control, Industrial Engineering, etc.
- ☐ **Modern Business Correspondence**
- ☐ **Expert Bookkeeping**
- ☐ **Commercial Law**
- ☐ **C. P. A. Coaching**
- ☐ **Stenotypy**

*Your choice of these booklets Free. Ask for one.*




Name..... Age.....

Present Position.....

Address.....


acknowledge the fact that they like the stories published in your magazine? Well, this is one woman who is voicing her opinion. I think your magazine is "tops" in reading enjoyment, and I intend to go on thinking so as long as you print stories like "The Earthquake Girl," and "The Return of Circe."

MYRA MAE CLARKE,
2954 Elm Street,
Dubuque, Iowa.

*It is our opinion that ten percent of our readers are women, and they do write us once in a while. But for some reason, they are rather less inclined to voice their opinions than the male readers. Maybe they aren't so egotistic eh? Don't care so much about seeing their names in print. But they* do *read us, steadily, and we appreciate them in spite of their silence.—Ed.*

### A SLUMP? AW, G'WAN!

Sirs:

Upon perusing the latest (Oct.) issue of A. S., I believe that AMAZING has come out of a four or five issue slump that started with the June issue and ended in September.

1. "Invisible Men of Mars"—In a word, swell.

2. "Mystery of the Martian Pendulum"—Good, but not worth all the blurbs.

3. "Kidnaped in Mars"—I wish we'd have more of Pragnell. This story was ok.

4. "The World of Miracles"—Readable, but nothing more.

5.—6. "Sgt. Shane of the Space Marines"—"Flame For the Future"—These two were awful. One a space opera and the other an implausible piece of hack work.

Puh-lease don't give Krupa one illustration per issue. He's head and shoulders above Fuqua and Jackson, so why not cash in on him? Say, with all the blurbs you've given Wilcox on his new opus, it ought to rank with Smith. But don't drag it out to three installments. Yours for less McGivern.

VINCENT SCULLIN,
Hotel Traymore,
Atlantic City, N. J.

*Okay, Louie, we'll try to persuade Krupa to find time for more illustrations for us. But we can't help but wonder why you want less McGivern, because our readers rate him the nation's number two writer. Wilcox doesn't write anything like Smith at all, and there'd be no comparison; no more than between Shakespeare and Webster. Smith is a scientist, Wilcox is exactly the opposite, and his stories therefore are more imaginative, and less pedantic. Smith's appeal lies in the amount of thought his stories make necessary, whereas Wilcox is effortless reading He fascinates, and Smith confounds. Both are amazing.—Ed.*

### SEE—NO SLUMP!

Sirs:

The stories you're buying for your two science fiction magazines are showing a great improvement

*(Continued on page 142)*

# IN MAY

**We gave you the biggest, best issue in AMAZING STORIES' 15-year history . . .**

## Now

**In answer to your demands, we're doing an encore to that nationally-acclaimed success . . . starting off the new year with a**

# Giant 244-Page SPECIAL JANUARY ISSUE

**Jam-packed with the world's finest science fiction . . . dynamic illustrations by top-notch artists . . . entertaining articles . . . clever cartoons . . . and many thrilling EXTRA features . . .**

## Don't Miss These GREAT STORIES!

**MYSTERY OF THE BLUE GOD—by Harry Bates** . . . The figure stood before him like a man frozen, a fixed flood of dark blood spread over face and chest; fixed motionless in its gushing flow! Sharp as the crack of a million volts, Mickey understood. This was not Talbor himself. It was his death-visitation! The crisis of life was before him, the moment in which he must enter the mysterious laboratory of doom! Talbor, his creator, was dead!

**Something NEW in Science Fiction!**

**THE CHLOROPHYLL GIRL—by Frank Patton** . . . NEW author (and good!) . . . NEW cover artist (he's great!) . . . NEW idea (the newest in years!) . . . "It's the end for man," said Sutton bitterly. "She was woman's last hope, and she's a plant! A plant, do you hear! When snow falls, she will die—and mankind will die. We have failed to create a new Eve."

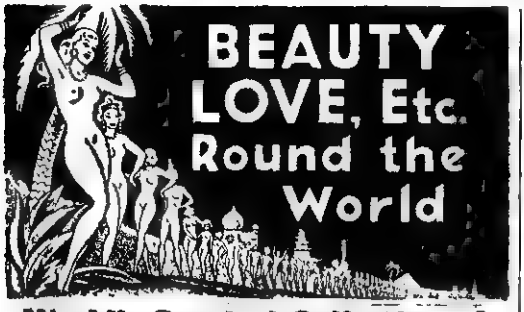
**THE FIEND OF NEW LONDON—by Don Wilcox** . . . The vast audience sat, too chilled by fear to flee. But the monster was ignoring them. It plodded inexorably forward—toward the platform where Ben Gleed stood waiting, white-faced, tense, but grimly defiant. The monster bared ice-cube teeth, blinked red-glowing eyes. It waved its strangling, ribbon-like arms threateningly . . . and Ben Gleed, facing the fiend, swallowed hard. He'd called this thing a fake, but . . .

**Thrill to these action-packed stories, as well as such spine-tingling tales as Q-SHIP OF SPACE by Duncan Farnsworth . . . OUTLAW OF MARS by Festus Pragnell . . . REHEARSAL FOR DANGER by P. F. Costello . . . PLANET OF DOOMED MEN by Robert Moore Williams . . . and dozens of other smashing stories, articles and features by AMAZING STORIES' leading writers . . . all in the**

## GIANT 244-PAGE SPECIAL JANUARY ISSUE

# AMAZING STORIES

***ON SALE AT ALL NEWSSTANDS NOVEMBER 7th — 25c***




## World's Greatest Collection of Strange & Secret Photographs

NOW you can travel round the world with the most daring adventurers. You can see with your own eyes, the weirdest peoples on earth. You witness the strangest customs of the red, white, brown, black and yellow races. You attend their startling rites, their mysterious practices. They are all assembled for you in these five great volumes of The SECRET MUSEUM OF MANKIND.

### 600 LARGE PAGES

Here is the World's Greatest Collection of Strange and Secret Photographs. Here are exotic Photos from Europe, Harem Photos from Africa, Torture Photos, Female Photos, Marriage Photos from Asia, Oceania, and America, and hundreds of others. There are almost 600 LARGE PAGES OF CAMERA SHOTS, each page 62 square inches.

### 1,000 REVEALING PHOTOS

You see actual courtship practiced in every quarter of the world. You see magic and mystery in queer lands where the foot of a white man has rarely trod. You see Oriental modes of marriage and female slavery in China, Japan, India, etc. Through the close up of the camera you witness the exotic habits of every continent and female customs in America, Europe, etc. You are bewildered by ONE THOUSAND LARGE PHOTOGRAPHS, including 130 full-page photos, and thrilled by the hundreds of short stories that describe them.

**Contents of 5-Volume Set**

VOLUME 1
The Secret Album of Africa

VOLUME 2
The Secret Album of Europe

VOLUME 3
The Secret Album of Asia

VOLUME 4
The Secret Album of America

VOLUME 5
The Secret Album of Oceania

### 5 PICTURE-PACKED VOLUMES

**Specimen Photos**
Dress and Undress Round the World
Various Secret Societies
Civilized Love vs. Savage
Strange Crimes, Criminals
Slavery
Omens, Totems & Taboos
Mysterious Customs
Female Slave Hunters
1,000 Strange & Secret Photos

The SECRET MUSEUM OF MANKIND consists of five picture-packed volumes (solidly bound together for convenient reading). Dip into any one of these volumes, and as you turn its daring pages, you find it difficult to tear yourself away. Here, in story & uncensored photo, is the WORLD'S GREATEST COLLECTION OF STRANGE AND SECRET PHOTOGRAPHS, containing everything from Female Beauty Round the World to the most Mysterious Cults and Customs. These hundreds and hundreds of large pages will give you days and nights of thrilling instruction.

### SEND NO MONEY

Simply sign & mail the coupon. Remember, each of the 5 Volumes is 10 inches high, and opened, over a foot wide! Remember also that this 5-Volume Set formerly sold for $10. And it is bound in expensive "life-time" cloth. Don't put this off. Fill out the coupon, drop it in the next mail, and receive this huge work at once.

METRO PUBLICATIONS
70 Fifth Ave., Dept. 1911, New York

Send me "The Secret Museum of Mankind" (5 great volumes bound together). I will pay postman $1.98 plus postage on arrival. If not delighted I will return book in 5 days for full refund of $1.98. (No foreign orders accepted at this low price!)

Name .....

Address .....

City ..... State .....

☐ CHECK HERE if you are enclosing $1.98, thus saving mailing costs. Same Money-Back Guarantee.


## DISCUSSIONS

*(Continued from page 140)*

in the last year. Since AMAZING STORIES changed hands, it has been making a steady but sure crawl up to the leadership of the science fiction field. You have done some great work.

I would like to see Finlay and Rogers do some work for you. Please ask Mr. Krupa to practice a little more on his humans. They're awful.

Are you going to give us another big issue like your 15th Birthday issue?

Why don't you reprint those old favorites, the Doctor Smith stories? We new readers get green with envy because we haven't read them.

BOBBY BURKHART,
406 N. Cherry Street,
Florence, Alabama.

*Finlay is coming, in our next issue, which is exactly what you want—a big issue like our birthday surprise. Hope you like this second big one!*

*It has been a surprising fact, but those old "Classics" every time they have been reprinted anywhere, are distinct flops. You see, the art of writing science fiction has advanced so much, that you new readers are getting a much better brand of story than those old decade-ago yarns. You'd be disappointed in many of the stories you "envy," we feel sure. So that's why we don't use reprint material at all. Besides, it's not fair to today's authors, who must live too.—Ed.*

### LIST OF "BESTS"

Sirs:

You asked in the Editor's Notebook of Fantastic Adventures for lists of favorite stories, eh? Well, how about AMAZING? The July, 1940 number is as good as any for a beginner

July, '40—The Monster Out of Space.
August—The Incredible Theory of Dr. Penwing.
September—The Man Who Never Lived.
October—The Voyage That Lasted 600 Years.
November—Revolt on the Tenth World.
December—Adam Link Fights a War.
January, '41—Mystery Moon.
February—Battering Rams of Space.
March—The Man Who Lived Next Week.
April—Big Man.
May—The Lost Race Comes Back.
June—Black Pirates of Barsoom.
July—Survivors From 9,000 B. C.
August—Yellow Men of Mars.
September—Enchantress of Lemuria.
October—Mystery of the Martian Pendulum.

MILTON LESSER,
2302 Ave. O,
Brooklyn, N. Y.

*Doubtless many readers will disagree on some of your selections, but you certainly have done a fine job of selecting good yarns. Any book with those stories collected in it ought to be well worth ten times what its actual price would be. You've named a lot of our own personal favorites!—Ed.*

*(Concluded on page 144)*

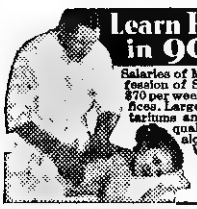
# FOR DEFENSE

BUY UNITED STATES SAVINGS BONDS AND STAMPS

ON SALE AT YOUR POST OFFICE OR BANK

## *AMERICA ON GUARD!*

Above is a reproduction of the Treasury Department's Defense Savings Poster, showing an exact duplication of the original "Minute Man" statue by famed sculptor Daniel Chester French. Defense Bonds and Stamps, on sale at your bank or post office, are a vital part of America's defense preparations.



**Learn Profitable Profession in 90 days at Home**

Salaries of Men and Women in the fascinating profession of Swedish Massage run as high as $40 to $70 per week but many prefer to open their own offices. Large incomes from Doctors, hospitals, sanitariums and private patients come to those who qualify through our training. Reducing alone offers rich rewards for specialists. Write for Anatomy Charts, sample lesson sheets and booklet—They're FREE.

THE College of Swedish Massage
30 E. Adams St., Dept. 512, Chicago

## CLASSIFIED ADVERTISING

***Songs—Poems***

SONGWRITERS: SEND POEM FOR OUR PLAN AND FREE Rhyming Dictionary. RICHARD BROTHERS, 168 Woods Building, Chicago.

***Salesmen Wanted***

MEN WANTED TO SUPPLY RAWLEIGH'S HOUSEhold Products to consumers. We train and help you. Good profits for hustlers. No experience necessary to start. Pleasant, profitable, dignified work. Write today. Rawleigh's, Dept. L-53 ZDF, Freeport, Ill.

***Female Help Wanted***

EARN TO $16 weekly taking orders in home, 2 dresses for $3 29. Just one of 140 wonderful values. No investment. Give age, dress size. Fashion Frocks, Desk 25111, Cincinnati, O

***Personal***

YOUR HANDWRITING reflects your personality, talents, abilities. Why not find out all about yourself, your friends, or business associates? International handwriting expert offers complete character analysis. Send sample of handwriting (ink) and one dollar, Naila Andreyeff, Englewood, New Jersey.

**FREE** SAMPLES OF REMARKABLE TREATMENT FOR

# Stomach Ulcers

**Due to Gastric Hyperacidity**

H. H. Bromley, of Shelburne, Vt., writes: "I suffered for years with acid-stomach trouble. My doctors told me I had acid stomach ulcers and would have to diet the rest of my life. Before taking your treatment I had lost a lot of weight and could eat nothing but soft foods and milk. After taking Von's Tablets, I felt perfectly well, ate almost anything and gained back the weight I had lost." If you suffer from indigestion, gastritis, heartburn, bloating or any other stomach trouble due to gastric hyperacidity, you, too, should try Von's for prompt relief. Send for FREE Samples of this remarkable treatment and details of trial offer with money back guarantee. Instructive Booklet is included. Write:

**PHILADELPHIA VON CO.** **Dept. 93-J**
**Fox Building, Philadelphia, Pa.**

**TYPEWRITER 1/3 PRICE**

STANDARD OFFICE MODELS
About ⅓ MFRS. ORIG. PRICE
Easiest Terms as Low as 70¢ A WEEK
All models completely rebuilt like brand new.
FULL 2-YEAR GUARANTEE
**No Money Down—10 Day Trial**
FREE COURSE IN TYPING INCLUDED
Send for FREE price smashing literature in colors. Fully describes and shows all models. See our literature before you buy. SEND TODAY.
INTERNATIONAL TYPEWRITER EXCH.
Dept. 1192, 231 W. Monroe St., Chicago, Ill.

10¢ A DAY

# RUPTURED?

## Get Relief This Proven Way

Why try to worry along with trusses that gouge your flesh press heavily on hips and spine—enlarge opening—fail to hold rupture? You need the Cluthe. No leg-straps or cutting belts. Automatic adjustable pad holds at real opening—follows every body movement with instant increased support in case of strain. Cannot slip whether at work or play. Light. Waterproof. Can be worn in bath. Send for amazing FREE book, "Advice To Ruptured" and details of liberal truthful 60-day trial offer. Also endorsements from grateful users in your neighborhood. Write:
**CLUTHE SONS, Dept. 39, Bloomfield, New Jersey.**

LEARN TO PLAY THE **HAWAIIAN GUITAR**

the Hawaiian way. Surprise and entertain your friends. Our simple method makes learning to play music as fascinating as a game. Shows you in pictures how to do it. Previous musical training unnecessary. Earn while learning by new plan. You pay for lessons as they are received. Write today for free information. A postcard will do. (Fine guitars supplied $7.50 and up.)

15c PER LESSON

**HAWAIIAN GUITAR INSTRUCTION**
P. O. Box 163, Dept. K-41, Maywood, Ill.

# WORK FOR THE

# GOVERNMENT

$1260 to $2100 YEAR
PREPARE NOW
Mail Coupon Today SURE

COUPON

Franklin Institute, Dept. C240, Rochester, N. Y.
Sirs: Rush without charge (1) 32-page book with list of U. S. Government Jobs. (2) Tell me how to qualify for one of these jobs.
Name .....
Address .....

*(Concluded from page 142)*

## COMMENT, AND A QUESTION

Sirs.

I began reading AMAZING STORIES two months ago, but I liked them so much I bought back issues to December, 1938. I want stories of Adam Link.

I have a question on gravitation. How is it that your authors say a man on Saturn or Jupiter would hardly be able to move, when on Earth a fly (comparatively as small as a man on Jupiter) can move around with ease?

JOHN DEVLIN,
645 Jefferson Place,
Bronx, N. Y., N. Y.

*Adam Link is coming soon. A fly is many times stronger than a man, in proportion to its mass. If a fly were as large as a man, it could pull a locomotive with ease. That same fly, on Jupiter, would be as handicapped as a man. So it is not a matter of gravitation at all, but of relative strength. Glad you like our magazine.*—ED.

## CORRESPONDENCE CORNER

Marvin Dorf, 3038 Colona Street, Philadelphia, Pa., wishes to buy back date AMAZING STORIES and other science fiction magazines. He would also like to have pen pals interested in science. . . . Benny Russell, 408 Lake Cliff Drive, Dallas, Texas, would like to correspond with girls about 18 years of age interested in traveling, convertibles, and dancing. He is 20. . . . C. Held, 494 Carlton Street, Buffalo, N Y., has complete files of scientific and weird fiction magazines which he would like to sell. . . . Bill Watson, 14, 1299 California Street, San Francisco, Calif., would like some foreign pen pals. . . . Robert R. Franck, 1530 Leimert Blvd., Oakland, California, desires to hear from any science fiction magazine fan in the East Bay who wishes to join a swell club. . . . Raymond Washington, Jr., Live Oak, Florida, would like all Florida fans to contact him immediately for the formation of a state-wide S-F club called "Fantasy Fans of Florida." Headquarters will be in Live Oak and if a sufficient number of fans are interested there will be booster stickers, and a fan-mag called "Scientifun" later on. . . . Mildred Lambert, 2627 Webster Avenue, Bronx, N. Y., 20 years old and interested in science, stamp collecting, model ship building, and reading SF magazines—would like correspondents from all over the world. . . . Fred DeBlon, 112 Braun Avenue, Hi. Park, New Brunswick, N. J., is interested in Edgar Rice Burroughs stories and would like to get as much of his writings as he can. . . . Louise Manfred, 532 23rd Street, Union City, N. J., is anxious to correspond with pen pals of either sex. He is 20. . . . N. Keel, 234 Genessee Street, Buffalo, N. Y., has a large stock of magazines for sale; send lists. . . . Tom Ludowitz 2310 Virginia, Everett, Washington, has the Venus novels by Bur-

*(Concluded on page 146)*


# Beauty and the Beasties

**Charlie Bright was gone! . . . Saki was pushing back Duane Thomas' armchair, pointing to a scrawny, squeaking rat . . . "See, is Chollie Blight—Saki fix him ancest'lial dlink!"**

**Suddenly Saki clapped one round palm to his brow in horror . . . "Saki fo'get—Boss Duane dlink cocketail too!"**

**Duane felt himself shrinking . . . Soon he was down on all fours, wagging his tail hysterically!**

**What has the servant Saki done to his master in an effort to foil the blackmailing Bright? . . . Can Duane be changed back into a man? . . . What will happen to beautiful Wendy, Duane's fiance, target of Bright's trickery? . . . Thrill to every breath-taking word of this unique story—BEAUTY AND THE BEASTIES—by the one and only David Wright O'Brien . . . one of the six great tales in the big**

**DECEMBER ISSUE**

# fantastic ADVENTURES

**ON SALE AT NEWSSTANDS EVERYWHERE OCTOBER 17!**

# A CITY ON CALLISTO

## BY HENRY GADE

**On this month's back cover you will see Frank R. Paul's city of the Callistonian temple builders, the metropolis of Serenis. It is built on a lake surrounded by mountains**

CALLISTO is the one satellite of Jupiter which is capable of supporting life which could be compared to that of Earth. It is large enough, and it has a great possibility of possessing an atmosphere like our own in many respects.

Let us voyage in imagination, with the help of artist Paul's vivid brush, to Serenis, the city built on a lake, amid rocky gorges and scenic mountain ranges.

Serenis, startlingly, has much in common with our own Venice. Not only in the fact that much of it is built in aquatic surroundings, but that its peoples, and its arts, are much along the same picturesque, romantic, cultured lines.

Because Callisto is so mountainous, its peoples found it necessary to use the mountain lakes, which are warmed to a pleasant temperature by the volcanic seams underlying the mountain ranges. They built a city beautiful under the languorous influence of their surroundings, and expressed their artistic temperament to the utmost.

Lovely white marble (and colored stone too) was used to construct the dwelling places, which dot the water's surface, and perch along the cliffs and gorges surrounding the lake. They are a queer likeness of Greek, Roman, and Florentine architecture, yet with a weird individuality all their own. They are as beautiful and as graceful as their builders.

The Callistonians are tall, willowy people, sinuous of body and of limb. They have four arms, which are supple and twining, apparently jointed at many points so that they are pliant and vine-like, and not ugly-jointed as are humans.

They seem to have ascended from the reptile family, retaining a leathery-scale type of skin, which is a vivid and arresting blue in color. Their heads are crowned with a great mass and mane of pure white hair which is very striking in its effect.

Their clothing is simple, consisting of a tight bodice, surmounting a flowing, simple, skirt in the case of the females, and a short pantaloon in the case of the males. They wear few ornamentations or affectatious jewelry.

Transportation about the city is either on foot, or in small, round boats made of great gourds which grow naturally on Callisto.

Paradoxically, the people of Serenis are not swimmers, although each one is taught to swim enough to save himself from death by drowning. Only an accident ever sends a Serenite into the water.

Serenis would be a paradise for Earth people, who visit such places as Hot Springs, Mineral Wells, because of the health-giving properties of the water, for Serenis is built on a lake of such water, and the huge fountain that plays in its center is a mineral artesian well which comes from deep in the bowels of Callisto, and, unlike Old Faithful geyser in Yellowstone National Park, it erupts continually, supplying the lake on which Serenis is built with a constant supply of fresh water.

There is no rain on Callisto, because the temperature of that world is constant, and temperature change is necessary to precipitation. Therefore, Serenis is unique, because other lakes on that world are subject to stagnation, and only its artesian geyser preserves its clean, sanitary state. In fact, the geyser is a natural sanitation department.

Vegetation on Callisto consists of semi-tropic trees and ferns, and the great gourds whose interior is filled, in a green state, with a juicy, edible pulp, and in its ripened state, with a great quantity of edible nut-like seeds.

Harvesting these gourds, the people of Serenis go into the gorges surrounding the city, and cut them from their anchorage, allowing them to slide into the water. Then they mount the very stable floating "boats" and pole them back to the city. Here they become food supply, perfectly preserved in their own natural shell, and later, by simply cutting off the top, natural boats to provide transportation.

The Serenites are great lovers of music, and they are extremely gifted in a combination of singing and yodeling, which they expertly and artistically employ among the echoing gorges, to produce an eerie and beautiful symphonic tone poem of voices and echoes.

War is unknown on Callisto, its people being amiable and happy, and steeped in artistic pursuits. They have an idyllic existence, and an idyllic temperament that fits into the languor of a world where it never storms.

**SECRETS ENTRUSTED TO A FEW**

*The Unpublished Facts of Life*

THERE are some things that can not be generally told—*things you ought to know*. Great truths are dangerous to some—but factors for *personal power* and *accomplishment* in the hands of those who understand them. Behind the tales of the miracles and mysteries of the ancients, lie centuries of their secret probing into nature's laws—their amazing discoveries of *the hidden processes of man's mind*, and *the mastery of life's problems*. Once shrouded in mystery to avoid their destruction by mass fear and ignorance, these facts remain a useful heritage for the thousands of men and women who privately use them in their homes today.

**THIS FREE BOOK**

The Rosicrucians (not a religious organization), an age-old brotherhood of learning, have preserved this secret wisdom in their archives for centuries. *They now invite you to share the practical helpfulness of their teachings.* Write today for a free copy of the book, "The Secret Heritage." Within its pages may lie a new life of opportunity for you. Address Scribe H.Y.Y.

**The ROSICRUCIANS**
**(AMORC), SAN JOSE, CALIFORNIA, U. S. A.**

**HOW GAMBLERS WIN**

Twelve ways Professionals win with fair dice. No switching. No practice. One hundred keys and codes on twenty-four different backs. 50 cents. BEAT THE CHEAT, 28 pages of exposes, $1.00. The great OPEN BOOK, written in words of fire, 155 pages of exposes, $3.50. Free catalog included.
Box 2482-A SPECIALTY EXPOSE Kansas City, Mo.

LONELY!! 25c BRINGS PEN-PAL BULLETIN WITH 100 NAMES AND ADDRESSES. Box 5450, Metropolitan Station, Los Angeles, California.


## CORRESPONDENCE CORNER

*(Concluded from page 144)*

roughs and many other books by the same author. . . . Mrs. LaVerne Waddell, 4 Independent Street, Carnegie, Pa., is a post mark collector in need of some "exchangers." . . . S. Ritter, 1160 Simpson Street, N. Y. C., has about 55 SF and fantasy magazines he'd like to trade for others or for books of history or biography. He would also like to hear from ardent readers of history and biography. . . .

## THE MAN WHO WASN'T HIMSELF

*(Concluded from page 138)*

tance from the crowd in front of the laboratory doors, his hands pressed tremblingly to his face.

Mortain was dead, had killed himself—in the body of Jacques Perdeau!*

The wailing sirens in the distance suddenly seemed clearer, closer. The sirens of the police—who searched for one Mortain, cobbler killer. Perdeau wanted to scream. He was trapped. Trapped in Mortain's body!

Wildly Perdeau looked right and left. Flight—that was all there was left. A futile flight, for from the evidence he had left they would track him down in a few scant hours. The guillotine . . .

Perdeau's eyes were filled with the hunted madness of an animal. In Mortain's ape-like body he turned and lurched off down the darkened alley. The sirens grew louder, nearer . . .

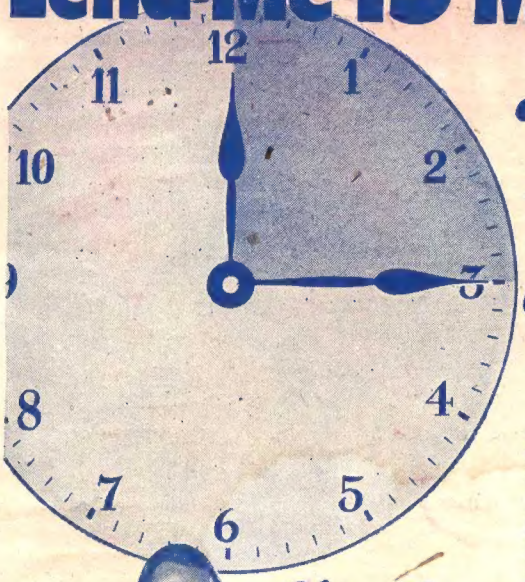
*This was the one little thing Perdeau forgot: the alcohol-sodden mind of Mortain was soon cleared of its poisons by the bloodstream of Perdeau's body, and instead of sleeping for ten hours of drunkenness, he recovered in a short time, and awoke to find himself in another body. His low type mind, faced with this incredible fact, could not accept it, and cracked under the strain. He went mad, and in the horror of madness, shot himself dead.—Ed.


**PATENTS, TRADE MARKS COPYRIGHTS**
Protect Your Valuable Assets.
Expert Service.
**LESTER L. SARGENT**
Registered Patent Attorney. 1115 K St.
Washington, D. C.


PRINTED IN U. S. A.

# Lend Me 15 Minutes A Day

## ..and I'll prove I can make you a NEW MAN



I'M "trading-in" old bodies for new! I'm taking men who know that the condition of their arms, shoulders, chests and legs—their strength, "wind," and endurance—is not 100%. And I'm making NEW MEN of them.

I don't care how old or young you are, or how ashamed of your present physical condition you may be. If you can simply raise your arm and flex it I can add SOLID MUSCLE to your biceps—yes, on each arm—in double-quick time! I can broaden your shoulders, strengthen your back, develop your whole muscular system INSIDE and OUTSIDE! I can add inches to your chest, give you a vise-like grip, make those legs of yours lithe and powerful. I can shoot new strength into your old backbone, exercise those inner organs, help you cram your body so full of pep, vigor and red-blooded vitality that you won't feel there's even "standing room" left for weakness and that lazy feeling! Before I get through with you I'll have your whole frame "measured" to a nice, new, beautiful suit of muscle!

### I Was a 97-lb. Weakling

All the world knows I was ONCE a skinny, scrawny 97-pound weakling. And NOW it knows that I won the title, "The World's Most Perfectly Developed Man." Against all comers! How did I do it? How do I work miracles in the bodies of other men in only 15 minutes a day? The answer is **"Dynamic Tension,"** the amazing method I discovered and which changed me from a 97-pound weakling into the champion you see here!

### Here's What Only 15 Minutes a Day Can Do for You

Are you ALL MAN—tough-muscled, on your toes every minute, with all the up-and-at-'em that can lick your weight in wildcats? Or do you need the help I can give you—the help that has already worked such wonders for other fellows everywhere?

In just 15 minutes a day, right in the privacy of your own home, I'm ready to prove that **"Dynamic Tension"** can lay a new outfit of solid muscle over every inch of your body. Let me put new, smashing power into your arms and shoulders—give you an armor-shield of stomach muscle that laughs at punches—strengthen your legs into real columns of surging stamina. If lack of exercise or wrong living has weakened you inside, I'll get after that condition, too, and show you how it feels to LIVE!

Actual photo of the man who holds the title, "The World's Most Perfectly Developed Man."

*Charles Atlas*

**America's Greatest "Builder of Men"**

Among all the physical instructors and "conditioners of men" ONLY ONE NAME STANDS OUT. That name is **Charles Atlas!**

In every part of the country **Charles Atlas** is recognized as "America's Greatest Builder of Men." Almost two million men have written to him. Thousands upon thousands have put their physical development into his capable hands!

And now that the call is for men capable of helping America meet and conquer any national emergency many thousands of others (even those already in their country's Army and Navy) are calling upon Charles Atlas to build the kind of men America vitally needs.

**Here's PROOF Right Here!**

"Results come so fast by your method that it seems just as if some magician put on the pounds of solid muscle just where you want them!" **—W. L., Missouri**

"Feel like a million dollars and have a 44" normal chest—a 2" GAIN IN 4 DAYS!" **—L. A. S., Illinois**

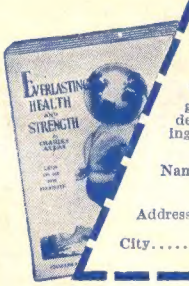
"My doctor thinks your course is fine. In 15 days have put 2½" on my chest and ½" on my neck." **—B. L., Oregon**

"Your book opened my eyes . . . 1¼" gain on my biceps and 1" more on my chest in two weeks!" **—J. F., Penna.**

## FREE THIS FAMOUS BOOK THAT TELLS YOU HOW TO GET A BODY THAT MEN RESPECT AND WOMEN ADMIRE

Almost two million men have sent for and read my book, **"Everlasting Health and Strength."** It tells you exactly what **"Dynamic Tension"** can do. And it's packed with pictures that SHOW you what it does. Results it has produced for other men. RESULTS I want to prove it can get for YOU! If you are satisfied to take a back seat and be pushed around by other fellows week-in, week-out, you don't want this book. But if you want to learn how you can actually become a NEW MAN, right in the privacy of your own home and in only 15 minutes a day, then man!—get this coupon into the mail to me as fast as your legs can get to the letterbox! CHARLES ATLAS, Dept. 9L, 115 East 23rd Street, New York City.

## MAIL THIS COUPON NOW!




**CHARLES ATLAS, Dept. 9L, 115 East 23rd Street, New York City**

I want the proof that your system of **"Dynamic Tension"** will help make a New Man of me—give me a healthy, husky body and big muscular development. Send me your free book, "Everlasting Health and Strength."

Name.....
(Please Print or Write Plainly)

Address.....

City..... State.....

# SERENIS, WATER CITY OF CALLISTO

**The people of Callisto love beauty, and their city is built on a lake. It is the Venice of the outer worlds.** **See page 145.**